Progress Report on Forest Administration in the Hyderabad Assigned dist.
1879-80

Forest - Report

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No. 652F., dated Simla, the 9th October 1880.

From—The Hon'ble C. Grant, c.s., Offg. Secretary to the Govt. of India, Home, Revenue and Agricultural Department,

To—The President at Hyderabad.

I am directed to acknowledge the receipt of the letter from your Secretary for Berar, No. 236, dated the 19th August last, forwarding the Annual Report of Forest Administration in the Hyderabad Assigned Districts for the year 1879-80, with a memorandum by the Commissioner, and your remarks thereon.

2. Regarding the proposed Forest Rules and other matters in connection with forest administration in the Hyderabad Assigned Districts, orders were lately communicated to you in the letters from this Department quoted in the margin. For instructions on these matters it will suffice to refer to the letters in question; on other subjects I am to communicate to you the following remarks on the present occasion.

No. 510F., dated the 19th August 1880.
" 512F., 19th " "

3. The area of the demarcated State forests is reported to be 817 square miles at the close, in the place of 866 square miles at the commencement of the year. The reduction of the area is explained by the alterations made in the classification of certain forests, of which the principal is that the Kelapur forest has been transferred to the class of reserved district forests. In the aggregate area of the unreserved district forests there has been a decrease which is due to extended cultivation.

4. The area of, and the receipts and charges on account of, the different classes of forest are reported as follows:—

	Area. Square miles.	*Receipts.* Rs.	*Charges.* Rs.
Direction	... ...	...	17,586
Demarcated State Forests ...	... 817	20,268	41,324
Reserved District Forests ...	... 571	29,844	5,965
Unreserved District Forests ...	... 2,977	2,57,389	45,332
Total	... 4,365	3,07,501	1,10,207

Thus the management of the State forests, which are strictly protected, has resulted in a deficit of Rs. 21,000. The reserved district forests, which are less strictly protected, have yielded a surplus of Rs. 24,000, while the unreserved district forests, the protection of which is nominal, have yielded a surplus of Rs. 2,12,000.

5. Of the total forest revenue, Rs. 1,45,000 is on account of grazing and fodder grass, of which Rs. 6,574 was collected in the Melghat forests, Rs. 1,32,982 having been realized by tahsil establishments in the district reserved and unreserved forests.

6. The most important forests in Berar, as far as the supply of produce to the open country of the Purna valley is concerned, are those of the Melghat hills. During the year under review the Melghat forest revenue amounted to Rs. 1,16,444 from the unreserved, and Rs. 19,334 from the reserved forests, and, compared with last year, the principal items have yielded the following amounts:—

Melghat Unreserved Forests	1878-79. Rs.	1879-80 Rs.
Timber II *a*.	74,890	88,746
Firewood and charcoal II *b*.	6,277	7,773
Bamboos II *c*.	9,513	11,704
Grazing II *d*.	5,341	6,574
Minor produce II *e*	2,079	936
Other items—III and V	667	711
	99,367	1,16,444
Reserved Forests	22,888	19,334
Total ...	1,22,255	1,35,778

The revenue realized on account of the reserved forests was chiefly derived from timber.

7. These figures are interesting, inasmuch as they furnish an indication of the quantity of timber, bamboos and other produce of the Melghat forests made available for the consumption of the people in the open country of the Purna valley. From statement D, appended to the report on Forest Administration in the Hyderabad Assigned Districts by the Inspector General of Forests, it would appear that the revenue realized from these forests has, with considerable fluctuations, since 1866-67, risen from about Rs. 50,000 a year to the present figure.

The rates at which the Melghat forest revenue have been levied during this period have possibly not been the same throughout; yet it may perhaps be feasible to make an estimate of the quantity of timber and bamboos removed and the number of cattle sent to graze in the Melghat forests in former years, and thus to form a conclusion regarding the increased consumption of the produce of these forests.

8. In paragraph 16 of his report, the Officiating Conservator estimates the quantity of timber and firewood exported from the Melghat during the year under review as follows :—

				Cubic feet.
Teak, tewas, and shisham	...	...	...	254,148
Other kinds	...	...	...	112,922
Fuel and wood for charcoal	...	...	...	270,021
		Total	...	637,091

and he draws attention to the increase as compared with the previous year. In bamboos also he reports an increase, 1,170,000 pieces having been exported against 1,043,000 in 1878-79. The number of cattle sent to graze in the Melghat from the Ellichpur and Akola districts, Mr. Bagshawe reports to have been 118,173. Now that an attempt has been made to record the quantity of produce exported from the Melghat forests in a systematic manner, it will be possible to make an exact comparison year by year of the quantity consumed.

9. Good progress is reported in pushing on the completion of the Ellichpur-Pili road and the construction of feeder roads. A network of cart roads through the Bairagarh reserve must greatly facilitate the supply of the adjoining open country with forest produce at moderate rates. The steps taken to demarcate the Jiri reserve on the outer hills adverted to in paragraph 5 of Mr. Bagshawe's report will, it is hoped, ensure a permanent supply of forest produce from the western part of the Melghat hills.

It is satisfactory that the Commissioner bears testimony to the good arrangements made for meeting the requirements of the villages in the Bairagarh reserve.

10. Fire protection has been successful in the Northern Division, where failures were insignificant. The total area protected in the Melghat was, however, less than last year, because no protection was attempted of that part of the former Gugamal reserve which was excluded from reserved forests in 1878-79.

In the Southern Division disastrous fires occurred in Garu Matergaon, Ghatbori and Kinwat, and the result was that out of 135,643 acres, the protection of which was attempted, no less than 63,360 acres were burnt. This is not satisfactory. The Officiating Conservator justly remarks that natural reproduction cannot progress satisfactorily while protection from fire is incomplete, and it is hoped that better success will be attained in future.

The reports of former years contained a full account of the beneficial effect of fire protection upon the condition of the forest. Mr. Bagshawe is silent upon this point, and a remark made by the Commissioner on the margin of paragraph 22 of the report would seem to indicate that Mr. Jones entertains doubts regarding the efficiency of fire protection in improving the condition of the forest. This important subject will doubtless receive your earnest attention.

11. In paragraph 25 the results of the registration of floods in the Sipna river at Pili are recorded. These observations, if steadily continued and recorded in a complete and intelligent manner, may eventually throw some light upon the effect of continued fire protection upon the flow of this river. I am directed to suggest that the Conservator should consult Mr. Blanford, the Meteorological Reporter to the Government of India, upon the method of making and recording these observations in connection with the meteorological observations which have already been placed under the control of that officer.

12. The extensive damage done by frost in the plantations of both the Northern and Southern Divisions is much to be regretted.

In the hills of the Melghat it was well known that severe frosts are not uncommon, but the destruction of the whole of the plantations in the Kinwat reserve is most remarkable. Such frosts could hardly have been expected in latitude 19° 30′ north, and at no great elevation. The area destroyed is reported as 434 acres of old plantations and 277 acres planted in 1879. The locality should be carefully examined, and an account should be given in future annual reports of any plants that may throw up fresh shoots and survive.

13. In paragraph 41 the Officiating Conservator states his opinion that additional care in fire protection and the consequent improvement in natural reproduction will do more for the forests than artificial planting.

This may be the right view to take where the natural forest consists of those species which it is desired to propagate. But a reference to paragraphs 89 to 92 of the Inspector General's report on the forests of the Hyderabad Assigned Districts shows that the object with which plantations in Kinwat were undertaken, was to increase the proportion of teak and of other more valuable species which are scarce or are wanting in that forest. Perhaps other kinds of trees will be found to resist frost better than teak, and the question should be considered.

14. The Governor General in Council looks forward with interest to the results of the examination of the district reserves, adverted to in paragraph 7 of the report. The next annual report should contain a brief account of the system of management adopted and proposed in regard to these areas. In a progressing country like Berar it may be regarded as certain that, in addition to the large reserves of the Melghat and South Berar, the necessity will in time be felt, of protecting smaller areas near towns and villages in order to ensure a permanent yield of firewood and cattle fodder.

15. The report, though showing care and intelligence, might have been somewhat more methodically arranged and some repetitions might have been avoided. The absence of a detailed review by the Commissioner and by yourself has been noticed with regret. The report was received in very good time, and, though similar punctuality will in future be most desirable, some slight delay may, if necessary, be incurred for the sake of transmitting with the report your detailed review, which will be of much assistance to the Government of India The Governor General in Council is glad to observe that Mr. Bagshawe has given satisfaction in Berar.

No. 653F.

Copy of the above, with a copy of the report, forwarded to the Foreign Department for information.

No. 654F.

Copy of the above, with a copy of the report, forwarded to the Public Works Department for information, with reference to paragraph 9.

No. 655F.

Copy of the above, with a copy of the report, forwarded to the Meteorological Reporter to the Government of India for information, with reference to paragraph 11.

No. 1745 OF 1880

Remarks by the Resident at Hyderabad, on the Forest Report of the Hyderabad Assigned Districts, for 1879-80.

THIS Report, just printed, has been submitted without the usual review of the Commissioner, as explained in that officer's covering letter of 27th July last. As it must reach the Government of India by 1st September, the Resident is unable, in the press of other work, to detain it for any detailed examination of its contents; a circumstance, however, which appears to call for little regret, owing to his having lately addressed the Government of India at some length on the two important subjects referred to in para. 3 of Mr. Jones' letter, *viz.*, the improvement of our forest rules and the re-organization of forest charges.

2. The opening para. of the Report shows that the areas of Demarcated State Forests, Reserved and Unreserved District Forests, have undergone some slight changes during the past year which are explained and call for no remark here. The Report also shows that with reference to the management of, and exhibition of results obtained in, District Reserved and Unreserved Forests, the remarks made in the Commissioner's review of the Forest Report of 1878-79 have been borne in mind; though the Deputy Conservator has yet to show in his Annual Report separately* the produce of Reserved and Unreserved Forests.

*See paras. 16 and 49 of present Report.

3. The area and revenue of forest lands in Berar are returned as below:—

	Area in square miles on 31st March 1880.	Receipts for 1879-80.
		Rs.
Demarcated State Forest	817 ...	20,268
Reserved District "	571 ...	29,844
Unreserved "	2,977 ...	2,57,389
	4,365 ...	3,07,501

Compared with the preceding year, the receipts have increased by Rs. 18,800, the expenditure by Rs. 3,267, and the net revenue by Rs. 15,534. The total expenditure on forests was Rs. 1,10,207, and the surplus to credit of the year under review stands at Rs. 1,97,294.

The revenue is mainly derived from the unreserved forests, in reference to which the Government of India in their remarks on the Forest Report for 1878-79 observed that "as the waste and forest lands designated as unreserved District Forests are available for the extension of cultivation there must necessarily be some uncertainty regarding their area. The sole reason why these lands are designated as unreserved forests is that portions of them may hereafter be included in the reserved forests."

4. It is unfortunate that the demarcation of the Kelapur State Reserve cannot yet be reported complete.

The proposals referred to by the Government of India last year for the conservancy of the forest growth on the Amraoti Hills have been matured, and are being carried out.

In Home Department letter No. 860-F, dated 27th October 1879.

The schemes mentioned in paras. 5 and 6 of the present Report will doubtless find a place in the next Annual Report.

It is satisfactory to find that the examination and management of District Reserves have received attention (para. 7). Also that "the boundary lines and marks of State Forests have in all cases been duly maintained during the past year."

5. The Deputy Conservator has this year been able to report a satisfactory decrease in prosecutions under Forest Rules, and he has, as requested, given some details regarding the punishments inflicted on convicted persons which are interesting, and illustrate the growing disposition of the people to recognize Forest laws.

6. The number of villages in the Bairagarh Reserve has now been reduced to 29 (in 1876 there were 56) " of which 15 have moved into the ten permanent or ' black soil' village sites, and it is hoped the remainder will soon do so."

The Commissioner visited the Melghat during the year, accompanied by Mr. Ballantyne, the Assistant Conservator, and, the Resident is glad to note, commends the manner in which the Forest Department has dealt with the rights and requirements of the inhabitants of this reserve.

7. In the matter of fire protection the Forest Department again shows successful results, 455,252 acres, or 87·6 per cent., of the area which it was attempted to protect having been preserved from fire at a total cost of Rs. 3,172, or an average of 1¾ pie per acre (para. 11). In respect to two reserves, however, in the Southern Division the Deputy Conservator had reason to find fault.

8. The year was a disastrous one for planting operations on account of abnormal frosts.

9. Good work has been done in the construction and repair of roads in the Melghat Reserves. The main line, the Ellichpur-Pili Road, will, it is to be hoped, be completed as estimated before 1882.

10. The information given in the Report with regard to District Reserves will next year be more complete. The whole subject of the future management of these reserves may be left with confidence to the Commissioner and the Deputy Conservator. The point referred to in para. 55 of this Report should be looked into. It was noticed last year.

11. The Deputy Conservator expresses a hope that the current year will witness the introduction of several important reforms in the administration of the Melghat. The forest and revenue administration of this tract have lately received special consideration consequent on the Commissioner's tour through the Melghat.

The restriction of Dhya cultivation in the Melghat Unreserved Forests will now be directed, as recommended by the Deputy Conservator and Commissioner (para. 59.) The matter is important as is evidenced by Mr. Bagshawe's remarks.

12. To these few remarks the Resident desires to add an expression of his satisfaction that the health of the officers and subordinates of the Forest Department, has not suffered during 1879, as in previous years.

The administration of the Department, under the general supervision of the Commissioner, is again creditable to the Deputy Conservator, Mr. Drysdale, and the Forest officers, among whom Mr. Ballantyne is conspicuous for the valuable service he has rendered in the Melghat. Mr. Drysdale took furlough last January; and his place has been filled since the middle of February by Mr. C. Bagshawe, who has drawn up the present Report, and has conducted his duties in a manner which has obtained the high commendation of the Commissioner. The Resident observes with pleasure that Mr. Bagshawe has brought to special notice the services of six native Forest subordinates mentioned in the concluding para. of his Report.

(By order,)

G. H. TREVOR,

Secretary for Berar.

HYDERABAD RESIDENCY,

19th August 1880.

No. 3657 of 1880.

From

W. B. JONES, Esq., C. S.,

Commissioner,

Hyderabad Assigned Districts.

To

The SECRETARY for BERAR to the RESIDENT,

Hyderabad.

Dated Amraoti, *27th July* 1880.

Sir,

I have the honor to submit the Forest Report for 1879-80. It only reached me yesterday; it was impossible for the Deputy Conservator to have sent it sooner, and as it must be in your office by the 1st August, it is not in my power to review it as I did those of 1877-78 and 1878-79. I have therefore confined myself to making a few marginal notes on the Report itself. When I receive the Report in print, I will go over it again with the district reports, which I beg may be returned to me as soon as they can be spared.

2. Fortunately there is much less need than in former years for remark on my part. The Deputy Conservator has undertaken for me the task which last year I had to undertake myself, and for the first time has given due prominence to district forests in the Forest Report of the province. Notwithstanding his recent arrival, Mr. Bagshawe has evidently mastered all the peculiarities of Berar forest administration, and has dealt with his subject in a thorough and comprehensive manner.

3. Another reason why no lengthy review seems required at my hands, is, that I have recently submitted at great length my views regarding the two most important subjects now under consideration, *viz.*, forest rules and the re-organization of forest charges. There are, it is true, a great many other matters which require attention. Mr. Bagshawe indicates many of them and others might be mentioned, but while the Deputy Conservator's office was stationed at Chikalda, work that required our joint attention was carried on under difficulties which will now disappear. By the end of the current year the good effect of the change to Amraoti, will, I trust, have become apparent.

4. I concur in Mr. Bagshawe's remarks regarding his subordinates; and of Mr. Bagshawe himself, I would say that he has addressed himself to his duties in a part of India which was quite new to him, in a manner which marks him as an officer of unusual capacity and intelligence, and that I anticipate much advantage from his appointment to the province.

I have the honour to be,

Sir,

Your most obedient Servant,

W. B. JONES,

Commissioner,

Hyderabad Assigned Districts.

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No. 947 of 1880-81.

From

The Offg. CONSERVATOR of FORESTS,

Hyderabad Assigned Districts,

To

The COMMISSIONER,

Hyderabad Assigned Districts

Dated Chikalda, 22*nd July* 1880.

Sir,

I have the honor to submit the Progress Report of the Forest Administration in the Hyderabad Assigned Districts for the year 1879-80, and to inform you that it could not be despatched on the appointed date as the Revenue and Expenditure Statements were only received from the Deputy Accountant General, Hyderabad, on the 20th instant.

SECTION I.—Summary of Administration during the year.

1.—*Area and Boundaries.*

Forest area of the province.

1. The following statement shows the changes that have taken place in the forest area of these districts:—

Description of Forest.	Area in square miles.			
	On 1st April 1879.	Added during year.	Excluded during year.	On 31st March 1880.
Demarcated State Forests	866	2	51	817
Reserved District do.	500	81	10	571
Unreserved do. do.	3,097	69	189	2,977
Total ...	4,463	152	250	4,365

The increase in the area of Demarcated State Forests is nominal, and due to fractions of over half a square mile in acres being for the first time shown as whole square miles. The reduction in area is due to the temporary classification of the Kelapur Demarcated State Forest (area 50 square miles) as a reserved district forest, and to four small teak tracts, Mangla, Dapura, Renkapur and Javalgaon (aggregate area one square mile) being similarly dealt with. The forests in question are undemarcated, and have, pending settlement, been placed under the Deputy Commissioner of Wun. The area of the Penganga Demarcated State Reserve has been reduced by 105 acres in order to commute the grazing rights alluded to in para. 8 of last year's Report.

The increase in Reserved District Forests is due to the transfer of Kelapur, the present area of which is now ascertained to be 76 instead of 50 square miles; to the transfer of the square mile of teak tracts already alluded to, and to fractions of square miles in acres being dealt with as above. The decrease is due to ten square miles of Reserved District Forests in Wun having been given up for cultivation by the Resident's order.

The area of Unreserved District Forests still includes fallow culturable land, and the additions and reductions in this class of forest are due to decreased and increased cultivation, and to some trifling corrections in the calculations of area.

The final result is that Reserved Forests, as a whole, show a net increase of 22 square miles, and Unreserved Forests a decrease of 120 square miles.

According to the above statement, the percentage of the different descriptions of forest to the area of these districts on the 31st March was :—

Demarcated State Forests...	4·6
Reserved District Forests	3·2
Unreserved do.	16·8
	24·6

Demarcation of State Forests.

2. The boundary lines and marks of State Forests have, in all cases, been duly maintained during the past year.

Kelapur proposed State Forest.

3. The Kelapur State Reserve scheme is still under consideration, but, it is hoped, will be finally settled when the map of Kelapur, now being compiled, is submitted in August next.

Amraoti Hills Reserve.

4. On the completion of the map of the Amraoti Hills Reserve, final recommendations on the subject were in April 1880 forwarded by you to the Resident for sanction.

The following re-classification of the present district reserve was proposed :—

	Sq miles.
Closed reserved area	16
Do. do. for grass-cutting (rumnahs) ...	13
Open reserve for fuel and grazing	26
District or protected forest	29
Total ...	84

The Resident's orders have been received. The 16 miles of closed reserved area are now being made over to the Forest Department. The rest will be made over at the close of the season.

It is hoped the direct management of the 55 square miles proposed for reservation may be undertaken by the Forest Department this season. The scheme is practically that recommended by the Inspector General of Forests in paras. 165—173 of his suggestions.

Jiri Reserve.

The scheme has been referred to District Officers as the Deputy Conservator supposes.

5. The scheme to give effect to the Inspector General's suggestion regarding Jiri Reserve has been submitted to you, and is, I understand, under reference to District Officers. It proposes the reservation of 25 square miles of unreserved forest.

Formation of two Babul State Reserves.

This will soon be disposed of.

6. The proposal submitted for the reservation of two babul blocks in Akola, aggregating three square miles, alluded to in para. 6 of last year's Report, is still under consideration.

Examination of other District Reserved Forests.

This is a most important work.

7. The examination of the District Reserves not previously alluded to has been completed. Reports on all, and maps of the most important of these reserves are now in hand, and I have every hope of being able to submit schemes regarding their future management by August 1880.

Exclusive of Jiri the following areas have been examined in the year under report:—

	Sq. miles.
District Reserved Forest	265
Do. Coppices	101
	366

Areas examined in 1878-79:—

Amraoti	84	
Karanja	14	
Babul buns	36	
	—	134
Total area of District Reserves ...		500

Every effort has been made to give effect to your wishes regarding District Reserves as expressed in your review of the Forest Report for 1878-79.

2.—*Protection and Improvement.*

New Forest Rules for Berar.

Proposals to introduce the Act are before Government.

8. The new Forest Rules for Berar are still under review.

Prosecutions for breaches of Forest rules.

9. Prosecutions under the present Forest rules were as follows:—

Northern Division.

	Cases.	Convictions.
State Reserves	8	6
Melghat Unreserves	73	59
District Forests, reserved and unreserved ...	87	78

Southern Division.

State Reserves	14	11
District Forests, reserved and unreserved ...	46	38
	228	192

Or, in another form:—

State Reserves	22	17
Melghat Unreserves	73	59
District Forests, reserved and unreserved ...	133	116
	228	192

Details regarding these cases may be found in Form No. 48; but I may here note that in three prosecutions for firing the forest of Gugamal, three persons were fined to the amount of Rs. 110. In two cases of illicit felling in Bairagarh, the value of the timber being about Rs. 60, the wood was confiscated and fines of Rs. 121 inflicted. The Melghat cases were all on account of illicit export. In 59 cases affecting 153 persons, the value of the produce was about Rs. 200, fines aggregating Rs. 497 were inflicted, and the produce was confiscated.

In the Southern Division Reserves the following cases are noted:—

Firing Garumatergaon Forest: one man sentenced to three months' imprisonment with hard labour.

Shooting in Ghatbori Reserve: six men fined one rupee each.

Trespassing with cattle in Ghatbori: two men fined Rs. 13.

Shooting in Ghatbori: one man fined Rs. 5, and seven men Rs. 3 each.

Illicit felling in Ghatbori, value of timber Rs. 5, two men fined Rs. 10 each.

Lighting fires for cooking in Kinwat Reserve: 13 men fined Rs. 2 each.

The other cases were trivial in character.

Compared with last year, the prosecutions stand as follows:—

The number of prosecutions is absolutely small. The decrease compared with last year is also satisfactory.

	Cases.	Convictions.
1878-79 ...	300 ...	266
1879-80 ...	228 ...	192
Decrease...	72 ...	74

which is probably satisfactory.

Forest rights in Reserved Forests.

10. This important subject has received due attention during the past year.

In Bairagarh there are now only 29 villages, of which 15 have moved into the ten permanent or "black-soil" village sites, and it is hoped the remainder will soon do so. No further reduction in the reserve villages is wished for, as the existence of a certain number of villages facilitates fire protection, aids in the export of forest produce, and the maintenance of roads, wells, &c. During your tour in the Melghat in March last, the important question of a settlement of rights being drawn up for the Bairagarh villages was discussed, and it was decided that the following points should at once receive attention:—

I am glad to be able to record after visiting the reserve that the arrangements made by the Forest Department for the residents of the reserve seem both liberal and well-considered.

(*a.*) Fixing a limit to the population and head of cattle.

(*b*) Ascertaining if the requisite amount of culturable and pasturage land has been assigned, and if not, providing for a further allotment.

(*c.*) Permanently demarcating the ten "black-soil" village sites.

(*d.*) Drawing up Patwaris' maps, showing the village boundaries, culturable areas, pasturage, &c., and a record of rights conceded.

It is a matter of regret that the number of villages in Gugamal has fallen from 9 to 6, though the occurrence is easily explained by the fact that the export of forest produce from Gugamal is now limited to dry bamboos, grass and fruits, and the villagers' means of livelihood thereby removed. The soil in Gugamal is miserably poor, the water-supply deficient, and the profits derivable from trading in timber alone induced villagers to settle there.

The settlement of certain asserted grazing rights in the Penganga and Kinwat Reserves has been under consideration. .

In Penganga these have been met by the exclusion of 85 acres, and by giving a right to free grazing and the export of dry fuel in 503 acres of that reserve.

In Penganga 20 acres of land were excluded from the reserve to afford the Marwadi villagers access to a tank recently constructed by the Forest Department.

Area protected from fire.

11. The undermentioned areas have been protected from fire at an average cost of $1\frac{1}{3}$ pie per acre:—

		Acres.	Rs.
Northern Division.	Bairagarh ..	270,769	1,658
	Gugamal ...	115,200	251
Southern Division.	Garumatergaon	40,192	425
	Ghatbori ...	12,380	321
	Penganga ..	10,375	212
	Kinwat ...	9,336	305
	Total ...	458,252	3,172

Showing a decrease in acreage of 96,785, and increase of expenditure of Rs. 179. Of the increased expenditure Rs. 119 is in the Northern Division, Rs. 60 in the Southern Division. The extra cost of conservancy is due to the late rains of 1879 having kept the grass green until late in the season, and necessitated the re-burning of many fire lines. Of the decrease in acreage 76,800 acres is due to the area excluded from Gugamal in 1878-79, in which fire conservancy was first stopped this season; the balance, 19,985 acres, is due to failures in the Southern Division.

The following is a comparative statement of the areas protected in the last two years:—

	1879.	1880	Increase.	Decrease.
Bairagarh	271,789	270,769	..	1,020
Gugamal (after deducting area transferred to unreserved forests)	110,720	115,200	4,480	...
Garumatergaon	35,992	40,192	4,200	...
Ghatbori	6,640	12,380	5,740	...
Penganga	2,700	10,375	7,675	...
Kinwat	50,396	9,336	...	41,060
Total ...	478,237	458,252	22,095	42,080
			Net decrease 19 985	

Area under plantations.

12. The past year has been a disastrous one for planting operations, the Kinwat plantations having been completely destroyed by the abnormally severe frosts of the past winter, and those in Bairagarh suffered to a most disheartening extent.

In Kinwat 277 acres were planted with teak and bamboo at an expenditure of Rs. 978. These have been utterly destroyed, and the Assistant Conservator reports similarly with regard to the 434 acres of plantation in the same forest shown last year as stocked. It may be hoped some of the stronger and more deeply rooted seedlings in Kinwat may throw up fresh shoots this rains. In the meantime I do not feel justified in returning any portion of the area as fairly stocked, and therefore leave the area column blank until next year.

In Bairagarh 109 acres were planted with teak and bamboo for Rs. 1,020, and Rs. 1,225 were expended in the cultivation of areas previously planted up.

All the teak and most of the bamboo seedlings that came up in the rains of 1879 have been killed, but it is believed that a good deal of sound seed is yet in the ground and will germinate in the rains of 1880. No additional area has therefore been entered in Form No. 46, but the point will receive consideration next year.

Great mischief has been done by frost in the 1,412 acres shown as previously planted up, teak sapling, 12 to 15 feet high, having in some cases been cut back to the roots; but it is hoped that in most cases fresh shoots will be thrown up this rains. I have therefore felt justified in returning this area as fairly stocked.

Construction of roads in the Reserves.

13. The Ellichpur-Pili Road is fast approaching completion. The total length is 33½ miles, of which 23 miles are completed and open to traffic, and 10½ miles are in course of construction. The estimated cost is Rs. 3,22,598, of which Rs. 2,49,450 has been spent up to 31st May 1880. The Executive Engineer hopes three more miles of road will be finished by November next, and the remainder during 1880-81.

The Ellichpur-Pili Road is a great boon to the forests, and a triumph for the Public Works Department, as no extensive work of this description has ever been successfully carried out in the deadly climate of the Melghat.

I have inspected this road, and regard it as a model of what a forest road should be.

About eight miles of a feeder cart road, from Sembadoh on the Ellichpur-Pili Road to Raipur, have been made by the Forest Department for Rs. 3,250, and such roads are being steadily pushed on in 1880-81.

It is proposed next winter to improve and repair the existing track from Pili to Kalamkhar, and thus make it fit for cart traffic. When the preceding works have been completed, cart traffic from Ellichpur to Barhanpur will be feasible, and the Bairagarh Reserve be thoroughly accessible.

The Basim-Pusad Road is nearly finished.

14. No creeper cutting has been done in the Southern Division.

Creeper cutting.

In the Bairagarh Reserve of the Northern Division no creepers have been cut during the past year, the operation being held in suspense to allow of the effect of previous cuttings being observed, and a decision come to with regard to the best time and place for re-starting the work.

Repairs to wells.

15. As a rule, all wells in the different reserves have been kept in good order, and their number added to where requisite.

2.—*Yield and Working.*

General remarks.

16. With a view to their restoration to a healthy state, the State Forests are still, as a rule, unworked. The exports therefrom are noted in the form below:—

Description of produce.	Kurrass or 2 bullock dragging load.	Cart load.	Camel load.	Bullock, pony or donkey load.	Head load	No.	Cubic feet of solid wood.	Weight in lbs.	Value in Rupees.	Total per Budget Head.	Budget Head.
Northern Division.											
Teak, tewus, and sheshum removed by Government agency	791½	...		.	.	...	2,770	...	791	791	I.-a.
Bamboos do.	.	...		.	...	600	..	...	6	6	I.-c.
Teak, tewus, and sheshum removed by purchasers	4,579½	...	...	589	390½	...	17,228	...	4,923	5,490	II.-a.
Other kinds of wood	979½	...	...	...	1,188½	..	3,947	...	567		
Bamboos	..	..	...	...	...	623,712		...	6,237	6,237	II.-c.
Grass				6	...	..	...	630	3/16	4,475	II.-d.
Grazing dues ...	..	.	...	...	...	...	...	...	4,475		
Lac		...		...	5	...	...	273	2	2,029	II.-e.
Roots and fruits ...	...	44½	1	5,166	11,193½	...	...	1,162,489	2,027		
Confiscated and waif wood	...	...	..	..	. .	...	...		29	29	III.
Miscellaneous .. .	..	..	. .	. .		...	. .	...	277	277	V.
Total ..	6,350½	44½	1	5,761	12,777½	624,312	23,945	1,163,392	19,334	19,334	
Southern Division.											
Timber removed by purchasers .	...	...	...	..	...	...	..	...	...	...	II.-a.
Bamboos .	...	...	...		...	4,750	...	..	47	42	II.-c.
Grass .	...	2,336	..	1,081	.	...	...	2,076,060	453	453	II.-d.
Total	...	2,336	...	1,081	.	4,750	..	2,076,060	500	500	
Grand Total .	6,350½	2,380½	1	6,842	12,777½	629,062	23,945	3,239,452	19,834	19,834	

The District Reserved Forests, except those in Wun and Basim, have been worked as heretofore, but the yield in produce cannot be ascertained.

The Unreserved Forests in all districts have been worked steadily, but no return of yield can be given save for the Melghat, where the unreserved area is managed by the Forest Department.

The Melghat Unreserved Forest yield is given below :—

Description of produce.	Kurrass or two bullock dragging load.	Cart load.	Camel load.	Bullock, pony or donkey load.	Head load	Bundles.	No.	Cubic feet of solid wood.	Weight in lbs.	Value in Rupees.	Total per Budget Head.	Budget Heads.
Teak, tewus and seshum ..	65,103	...	.	1,850	52,688½	...	...	254,148	...	72,614	88,746	II. a.
Other kinds of wood ..	26,865		.		43,190¼	...	...	112,922	...	16,132		
Firewood ..	...	11,509	192	19,286	...	...	...	196,220	...	5,400	7,773	II.-b.
Fuel used for making charcoal	...	30½	...	6,418	6,928½	...	..	73,801	...	2,373		
Bamboo ..	...		...	..	...	...	1,170,372		.	11,704	11,704	II.-c.
Grass . ..	...	8,024½	37	12,644	...	...	...	. .	8,083,740	2,098	6,574	II.-d.
Grazing ..	...	...	...	..	...	...	...	...		4,476		
Lac	...	.	.	14	308	..	...	...	17,486	122	936	II.-e.
Teak leaves ...	...	..	...	...	...	9,188½	...	...	477,802	574		
Roots and fruits ...	...	91½		...	11¾	..	...	...	77,471	184		
Gum	...	...	..	..	8¼	...	...	..	429	2		
Other minor produce ...	...	8	...	4	294¼	...	...	...	22,441	54		
Confiscated, &c., wood ...	...	.	...	...	...	..	...	...	...	121	121	III.
Miscellaneous ...	...	.	...	...	..	...	...	...	...	590	590	V.
Total ..	91,968	19,663½	229	40,216	103,428¼	9,188½	1,170,372	637,091	8,679,369	1,16,444	1,16,444	

4.—*Financial Results.*

Financial results.

17. The financial returns for the year stand as follows :—

		Revenue.	Expenditure.	Surplus.	Deficit.
		Rs.	Rs.	Rs.	Rs.
Direction		...	17,586	...	17,586
Northern Division.	State Reserves	19,334	25,794	...	6,460
	District „	26,635	5,320	21,315	...
	Unreserved Forests	1,91,579	37,578	1,54,001	...
Southern Division.	State Reserves	934	15,530	.	14,596
	District „	3,209	645	2,564	...
	Unreserved Forests	65,810	7,754	58,056	...
	Total ..	3,07,501	1,10,207	2,35,936	38,642
	Deduct deficit			38,642	
	Net revenue for 1879-80			1,97,294	

Compared with last year, the receipts have increased by Rs. 18,800, the expenditure by Rs 3,267, and the net revenue by Rs. 15,534.

But this change has not, as I understand, been actually made.

It was last year decided by the Resident and yourself that the proceeds of grazing sales under Settlement Rule XIV. should not be credited to forest revenue, but to another land revenue head. In order to make clear the proportion grass and grazing revenue, as realised by District Officers, bears to the other forest revenue, I append a return of the realisations under the Settlement Rules and other sources. The figures include revenue from the Amraoti Hills and other district reserves. This return shows that Rs. 1,70,789, including

Rs. 1,33,092, for grazing sales, were realised by tahsil establishments, against Rs. 1,36,712 by forest establishments :—

	Amraoti District.	Ellichpur District.	Akola District.	Basim District.	Buldana District.	Wun District.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
XIV.	37,056	2,209	9,322	2,533	8,683	...	59,803
XV.	16,194	1,365	4,189	314	143	...	22,205
XVI.	7,486	287	5,305	2,401	7,926	...	23,405
Grazing cess ...	3,419	...	..	...	...	24,150	27,569
Total...	64,155	3,861	18,816	5,248	16,752	24,150	1,32,982
Other sources ...	6,468	3,488	4,982	8,834	4,217	9,818	37,807
Grand Total ...	70,623	7,349	23,798	14,082	20,969	33,968	1,70,789

Transactions of the year exhibited under main heads of revenue and expenditure.

18. The form below exhibits the receipts and charges of the year under the main budget heads :—

Heads.	Receipts.		Charges.	
		Rs.		Rs.
I.—Departmental timber operations ...	I.	797	I.	32
II.—Other revenue ...	II., III., & V...	3,06,704	II., III., V., IX., 75 per cent. of VI. and B ...	78,537
III.—Formation, protection and improvement of forests	...	...	VII., VIII., 25 per cent. of VI. and B. ...	31,638
	Total ...	3,07,501		1,10,207

SECTION II.—Reserved Forests.

a.—DEMARCATED STATE FORESTS.

A.—Northern Division.

1.—*Area and Boundaries.*

Area and boundaries of Reserves.

19. No alterations have been made in the areas or boundaries of the Northern Division Reserves.

2.—*Protection and Improvement.*

Prosecutions for breaches of Forest rules.

20. The cases for breaches of Forest rules demand no particular notice.

Area protected from fire.—General remarks.

21. The past season has been the most successful on record; the protection of 887,249 was attempted; failure ensued in only 1,280 acres, and 385,969 acres were preserved for Rs 1,909, or ·95 of a pie per acre.

Last year protection was attempted in 464,749 acres, with non-success in 5,440 acres, and success in 45,930 acres, the expenditure amounting to Rs. 1,790, or ·75 of a pie per acre.

The large decrease in area attempted in 1880 is explained as follows :—

Attempted in 1879		464,749
Transferred from Bairagarh to Central Provinces, *vide* para. 20 of Annual Report for 1878-79	700	
Transferred from Gugamal to the unreserved forests, *vide* para. 21 of above	76,800	
		77,500
Area attempted in 1880		387,249

Allowing for these exclusions, which do not affect the question, success was attained over an increased area of 4,160 acres. The slight increase in cost is due to a rise in the price of labor, to additional line-burning, and to a decrease in area with no corresponding decrease in length of lines.

Visit of the Commissioner, Hyderabad Assigned Districts, to Bairagarh.

I described the state of things outside the reserve in a memo. which was submitted to the Resident. The contrast between the reserved and unreserved parts was marked, but seemed to me to be due almost entirely to the exclusion of woodcutters and much less than I had expected to fire protection. My experience in such matters is very slight, but I had expected to see a much more abundant undergrowth in the fire protected part.

22. During your visit to Bairagarh in March 1880, the good effects of forest conservancy were brought to your notice, and need no description in this Report.

Gugamal Reserve.

23. The entire area of Gugamal has for the first time been successfully protected from fire.

Plantations in Bairagarh.

24. In Bairagarh Rs. 1,020 were spent in sowing 109 acres with teak and bamboo in "lines of patches," as described in 1877-78 and 1878-79 Reports. Part of the seed germinated last rains, but the young growth was killed by frost in December and January. It is hoped the remainder of the seed will germinate this year with more favourable results. Rs. 1,225 were spent in weeding and tending areas previously planted up.

The frosts in December and January last were abnormally severe, and did much damage in the older plantations, and among the natural young growth in the forests.

Meteorological observations.

25. The following is a statement of the meteorological observations in the Melghat. They present no extraordinary phenomena, and have been duly communicated to Mr. Blandford, and his directions on the subject observed :—

Months.	Chikalda. Mean of Hygrometer. 10 A. M. Dry bulb.	Chikalda. Mean of Hygrometer. 10 A. M. Wet bulb.	Chikalda. Mean of Hygrometer. 4 P. M. Dry bulb.	Chikalda. Mean of Hygrometer. 4 P. M. Wet bulb.	Makhla. Mean of Hygrometer. 10 A. M. Dry bulb.	Makhla. Mean of Hygrometer. 10 A. M. Wet bulb.	Makhla. Mean of Hygrometer. 4 P. M. Dry bulb.	Makhla. Mean of Hygrometer. 4 P. M. Wet bulb.	Chikalda. Mean of Thermometer. 10 A. M. Dry minimum	Chikalda. Mean of Thermometer. 10 A. M. Wet minimum.	Makhla. Mean of Thermometer. 10 A. M. Dry minimum	Makhla. Mean of Thermometer. 10 A. M. Wet minimum	Chikalda. Rain-fall. Inches.	Chikalda. Rain-fall. Cents.	Chikalda. No. of rainy days.	Makhla. Rain-fall. Tree gauge. Inches.	Makhla. Rain-fall. Tree gauge. Cents	Makhla. Rain-fall. Ground gauge. Inches.	Makhla. Rain-fall. Ground gauge. Cents.	Makhla. No. of rainy days.	Raipur Rain-fall. Inches.	Raipur Rain-fall. Cents	Raipur No. of rainy days.	Pill. Rain-fall. Inches.	Pill. Rain-fall. Cents.	Pill. No. of rainy days.	Patia. Rain-fall. Inches.	Patia. Rain-fall. Cents.	Patia. No. of rainy days.	Remarks.
April 1879	86·1	61·3	82·2	64·8	87·1	64·7	94·2	67·9	73·5	54·1	73·8	58·6	..	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
May "	85·4	67·8	90·2	70·4	88·3	70·7	94·1	73 5	75·2	61·4	76·7	64·9	2	43	5	...	27	...	27	6	1	0	4	...	57	2	...	98	4	...
June "	74·2	73·2	79 2	71·8	77·1	72·3	82·2	74·0	70·3	64·2	70·0	67·0	18	8	14	18	94	19	76	14	16	3	15	15	18	54	8	9	12	...
July "	70·0	68·2	72·4	70·5	73·8	71·7	76·0	72·9	65·9	64·2	68·5	67·3	8	23	17	11	93	12	32	17	8	28	14	8	53	9	5	76	13	...
August "	68·7	67·1	69·8	68·4	71·6	70·7	72·5	71·5	65·2	64·7	67·6	66·7	22	50	28	27	15	28	5	28	24	45	27	19	14	31	17	2	26	...
September "	73·9	71·9	76·4	73·5	75·0	67·3	73·8	70·2	68·5	67·2	65·5	63·9	18	86	17	20	1	21	87	17	25	46	17	21	9	14	16	14	16	...
October "	72·[illegible]	65·0	72·5	65·4	71·4	64·0	74·8	67·6	62·0	56·9	63·4	58·9	7	...	9	[illegible]	65	2	95	6	4	54	8	5	13	7	...	...	...	...
November "	68·4	56·6	70 2	58 6	64·4	54·9	72·8	61·7	54 3	47·8	58·0	54 2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...
December "	65·6	54·3	69·1	56·7	61·5	51·7	77·0	58·8	51·0	45·9	53·2	46·0	...	..	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
January 1880	71·3	57·9	73·3	60·0	64·1	53·5	73·2	61·1	54·7	48 2	55·6	47·3	...	..	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
February "	69·5	56·8	75·9	61·1	67 8	56·9	77·2	61·2	56·3	48·9	58·0	52·8	...	..	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
March "	83·5	64·2	85·6	66·9	82·3	63·1	98·0	65·0	70·6	55 9	71·0	57·4	..	..	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
	74·0	63·6	77·2	65·6	73·7	63·4	80·5	67·1	63·9	56·6	64·9	58·7	77	26	99	80	95	85	22	88	79	82	85	69	64	77	47	99	71	

As in previous years a register of floods in the Sipna has been kept, and a comparison of the last three years' observations may be of general interest :—

Name of river.	Month.	Pole reading.						Remarks.
		1877-78.		1878-79.		1879-80.		
		Feet.	Inches.	Feet.	Inches.	Feet	Inches.	
Sipna.	April	...	...	...	...	...	...	
	May	...	...	...	...	...	...	
	June	...	...	..	1	...	3	
	July	...	3	1	5	...	9	
	August	...	11	3	2	2	4	
	September...	...	11	3	1	2	3	
	October	...	5	1	2	1	7	
	November	...	...	...	...	...	4	
	December	...	...	...	...	...	...	
	January	...	..	...	...	...	...	
	February	...	...	...	...	...	...	
	March	...	...	...	...	...	...	

Feeders to the Pili Road.

26. Eight miles of a 12 feet feeder-road suitable for cart traffic has been opened out in Bairagarh from Sembadoh towards Raipur. The cost of this road, which in parts involved heavy cuttings, was Rs. 3,250; the line was skilfully selected, and the work has been economically carried out.

The Sembadoh and Raipur Forest Road is the first of a series of feeders to the Pili Road, by which it has been decided to open up the Melghat Reserves, and every effort has been made by Mr. Ballantyne to push the work on, and so place the resources of the reserves at the disposal of the people.

Other roads in Bairagarh.

27. The ordinary repairs to the old paths and roads have been carried out as usual.

Wells and tanks in Bairagarh and Gugamal.

28. Wells have been maintained where necessary, and one new one made. The Makhla tank proved a failure, and has been abandoned.

3.—*Yield and Working.*

Yield and working of the Melghat Reserves.

29. The policy of the past year has been, as heretofore, to allow the timber demand to be met from the unreserved forests of the Melghat. Gugamal has been closed from 1st November 1879, and from Bairagarh the exports have been limited to dry trees and fellings necessitated in making roads. Gugamal and Bairagarh have been open for the export of dry bamboos, and Block No. 10, and half of No. 12 in Bairagarh for green bamboo cutting.

A statement of the produce exported from the Northern Division State Reserves has been given in para. 16.

4.—*Financial Results.*

Financial results.

30. The following exhibits the actual money transactions of the Northern Division Reserves:—

Budget Heads	Bairagarh reserve	Gugamal Reserve.	Total
I.—Timber and other produce removed by Government agency	798	...	798
II.—Timber and other produce removed by purchasers, &c	6,289	11,992	18,231
III.—Confiscated and waif wood	11	17	28
V.—Miscellaneous	263	14	277
Total ...	7,311	12,023	19,334
Expenditure under A. and B.	20,033	5,761	25,794
Surplus	...	6,262	...
Deficit	12,722	...	6,460

Compared with 1878-79 the revenue of Bairagarh has increased by Rs. 2,505, chiefly owing to increased bamboo export; that of Gugamal has decreased by Rs. 6,059, owing to timber cutting having been stopped. The charges have increased by Rs. 4,793, a fact explained as follows:—

Increase in charges for roads	3,549
Increase in proportional share of the cost of Melghat revenue stations	1,244
	4,793

With reference to the last item I should explain that the reserves produce passes and dues are collected by the Melghat Revenue stations, and I have distributed the charges rateably on the revenue realized.

As we cannot put a money value on the annually increasing capital value of the Melghat Reserves, it is obvious that it is misleading to style these figures "financial results," and I give them simply to indicate the cost of the work of restoration and improvement now in progress.

B.—Southern Division.

1.—*Area and Boundaries.*

Area of reserves.

This is probably a temporary transfer preceding the preparation of maps and settlement of boundaries.

31 The Kelapur Reserve was transferred to the charge of the Deputy Commissioner of Wun on the 29th October 1879, in accordance with your No. 4383, dated 16th September 1879. The area of Penganga Reserve has been reduced as follows:—

(*a*.) By the exclusion of 85 acres of land in settlement of the grazing rights of Marwadi in accordance with your No. 5239, dated 12th November 1879.

(*b*). By the exclusion of 20 acres of land to allow the villagers of Marwadi access to a new tank, *vide* your No. 3393, dated 8th July 1879.

2.—*Protection and Improvement.*

Prosecutions for breaches of Forest Rules.

32. The following is a comparative statement of breaches of Forest rules in the Southern Division Reserves:—

	1878-79.		1879-80.	
	Prosecutions.	Convictions.	Prosecutions.	Convictions.
Ghatbori...	14	10	7	7
Penganga	2	2	5	2
Kinwat	2	2	2	2
Total ...	18	14	14	11

Cattle grazing in Garumatergaon and Ghatbori

33. The number of cattle pounded for trespassing in Garumatergaon and Ghatbori still decreases, the figures standing thus:—

	1878-79	1879-80.
Garumatergaon	1,191	630
Ghatbori	387	369

The question of grazing in the vicinity of these reserves may therefore be regarded as settled, and as one calling for no special attention in future reports.

Settlement of grazing rights in Penganga and Kinwat.

34. The grazing rights of the villagers of Panala and Marwadi in Penganga have been settled by the exclusion of 85 acres of land, as noted in para. 31, and by a right to free grazing, and the collection of dry fuel being conceded in 503 acres of land within the reserve.

Has been since disposed of.

The settlement of the grazing rights of Garl, Bori, and Therdi villages in the vicinity of Kinwat is under settlement.

Fire protection.—General.

35. Fire protection has met with varied success during the past season. Protection was attempted over 135,643 acres, of which 63,360 acres were burnt and 72,283 acres saved at a cost of Rs. 1,263, or 3¼ pie per acre, showing a decrease in area of 23,445 acres, and an increase in expenditure of Rs. 60 as compared with last year's figures.

Penganga.—Fire Conservancy.

36. In Penganga in 1879, 2,700 acres were protected at a cost of Rs. 293, in 1880, 1,200 acres were burnt, and 10,375 acres protected at a cost of Rs. 212. The only fire that occurred in the reserve was due to the negligence of a Forest guard when burning a fire line.

Garumatergaon.—Fire Conservancy.

37. In Garumatergaon 40,192 acres have been protected for Rs. 425 in 1880, against 35,992 for Rs. 266 in 1879. The increased charge is due to additional interior fire lines having been cut and burnt. Five fires, extending in all over 5,800 acres, occurred in this reserve, of which three crossed the outer boundary fire line, and two are assigned to the carelessness of trespassers. The previous facts do not redound to the credit of the ranger and his subordinates, and better results must be attained in 1881.

Garumatergaon was most unfortunate in the way of administration during the past year. Narsingrao was ranger of Matergaon in 1879, and grossly mismanaged his charge; disobeying orders, neglecting his work, and submitting misleading reports. The serious fires that occurred were reported on last year, and

Narsingrao was in consequence reduced a grade, and in October last transferred to Kinwat.

Unavoidable delays prevented Narsingrao leaving Matergaon until January, when he made over the forest in a most backward state as regards fire lines, and Bisesarsing, who relieved him, never picked up the time lost in November and December, or succeeded in making the forest as safe as it ought to have been from external fires.

Kinwat.—Fire Conservancy

38. In Kinwat, out of 54,236 acres, 50,396 acres were protected in 1879 for Rs. 443 during 1880. Rs. 305 have been spent, and only 9,336 acres protected.

Three fires occurred in Kinwat; the first on the 19th of March spread from a smouldering log left by one of the Foresters when line burning, the second on the 27th of March is supposed to have been kindled by some shikari, but the charge was not made good; the third on the 1st of May crossed the outer fire line from the unreserved forests. In the first two fires about 22,500 acres, in the last 22,400 acres of forest were burnt. Had the fire lines been properly burnt, the first and third fires would not have occurred, and an intelligent use of the interior fire paths should have confined the second fire to a few hundred acres.

Kinwat, like Matergaon, was unfortunate in its administration. Bisesarsing, ranger, who had successfully protected it for two fire seasons was transferred to Matergaon in October; he was ill, and on leave during November, December, and January, when a junior forester had charge, and in February only Narsingrao took up the work in Kinwat. Narsingrao's failure in Kinwat has been even more disastrous than in Matergaon, and his conduct is now under special inquiry

Ghatbori.—Fire-Conservancy.

39. In Ghatbori 6,640 acres were protected in 1879 for Rs. 201. During the past fire season 12,380 acres were protected for Rs. 321, 17,200 acres being burnt in 1879 against 11,460 in 1880.

The origin of forest fires in Ghatbori in past years has been attributed by the Forest Department to incendiarism, and the fires of 1880 have, with one exception, been regarded by district officers as the work of incendiaries; it is therefore very satisfactory to observe the partial success that has been attained in the protection of this forest. The orders you issued regarding fire conservancy in Ghatbori in May 1879 and April 1880, had a most salutary effect, as the following extracts from a report dated 26th June 1880, by the Deputy Commissioner of Buldana, will show:—

"From the 11th March to the 12th April last no less than 13 fires ravaged the reserve, destroying upwards of 16 square miles of forest, and although the 12th of April was succeeded by very nearly two and half months of hot weather, the fires suddenly and finally ceased on that date," "*viz.*, immediately the Patels and people saw that Government was determined to put a stop to incendiarism."

The fire lines at Ghatbori were well laid out, and skilfully used by the forester in charge, who is most favourably reported on by Mr. Prevost. Mr. Prevost himself was indefatigable in his efforts to preserve the forest from fire, and it is hoped that he will be rewarded with greater success next year.

Re-production in the Reserves.

40. Natural re-production in the reserves cannot be in a satisfactory state while the protection from fire is imperfect, and we can only hope that the teak and Anjan seedlings in Penganga and Kinwat will in part survive the trials they have gone through.

Kinwat Reserve.—Plantations.

41. The plantations in Kinwat were entirely destroyed by frost last winter, and have had to be written off in Form 46. Operations on a small scale on sites less exposed to frost are being undertaken, but, on the whole, I am inclined to believe additional

care in fire protection, and the consequent improvement in natural reproduction will do more for the forests than artificial planting.

Rain-fall in South Berar Reserves.

42. The following are abstracts of the South Berar Reserves rain-fall registers :—

Month.	Ganesh Chowky			Butchwady.			Marwadi Khurd.			Darati			Kaleshwar		
	Garumatergaon.			Ghatbori.			Pongangs.			Kinwat.			Kelapur		
	Feet.	Inches.	No. of days.	Feet.	Inches.	No. of days	Feet.	Inches.	No. of days.	Feet.	Inches.	No. of days.	Feet.	Inches.	No. of days
April	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
May	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June	3	75	7	9	6	10	5	96	14	6	95	13	9	30	18
July	3	90	6	6	56	6	6	75	12	5	2	13	2	17	12
August	12	4	20	11	85	25	11	69	21	20	24	22	15	60	20
September	6	67	9	5	...	12	10	37	11	4	30	9	6	24	11
October	2	47	5	3	91	5	1	94	6	2	85	5	...	...	.
November	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.
December	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...
January	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
February	...	...	...	...	...	...	...	...	...	...	4	1	...	...	...
March	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	28	83	47	36	38	58	36	71	64	39	40	63	...	...	...

Road in South Berar Reserves.

43 Forest roads in Ghatbori and Kinwat were repaired and made fit for cart-traffic where necessary, and forest work was much aided by the maintenance and improvement of the different district roads by the Public Works Department.

Buildings in South Berar Reserves.

44. One thana was erected in Ghatbori, and a series of new thanas are in course of construction at Matergaon and Pengaiga.

The provision of suitable accommodation for forest officials is a most important point in forest conservancy, and the erection of the necessary bungalows and thanas in each reserve is receiving attention. The great object is to encourage residence in the reserves, and reduce the chance of ill-health attending such residence

3.—*Yield and Working.*

Yield and working of South Berar reserves.

45. The South Berar Reserves are still allowed rest, grass and bamboos alone being exported.

The following is a comparative statement of exports during the last two years :—

	Grass in cart loads.	Bamboos by number.
1878-79	7,615 ...	2,600
1879-80	2,444 .	4,750

The decrease in grass sales is due to the plentiful supply of grass and fodder in village land which followed the abundant rains of 1878.

4.—Financial Results.

Financial results.

46. The monetary transactions of the Southern Division Reserves are exhibited below:—

Budget head.	Garumatergaon.	Ghatbori	Penganga.	Kinwat.	Total.
I.—Timber removed by Government agency ...	..	...	...	...	...
II.—Timber removed by purchasers	103	197	51	154	505
III.—Confiscated, &c., wood	...	5	...	...	5
V.—Miscellaneous	108	107	10[illegible]	102	424
Total ...	211	309	158	256	934
Expenditure under A. and B. ...	3,864	3,805	2,[illegible]82	4,979	15,530
Surplus ...	...	...	...	...	...
Deficit ...	3,653	3,496	2,724	4,723	14,596

The net cost of forest conservancy in the 211 square miles of reserves was therefore Rs. 14,596 in 1880, against Rs. 14,515 in 1879.

b.—RESERVED DISTRICT FORESTS.

1.—Area and Boundaries.

Areas of Reserved District Forests.

47. The areas of District Reserves entered in Form No. 45, show an increase of 81 square miles and decrease of 10 square miles, or a net increase of 71 square miles, which is explained as follows:—

(*a.*) Kelapur Reserve, hitherto classed as a State Reserve, has been transferred temporarily to the charge of the Deputy Commissioner of Wun as a Reserved District Forest under the authority of your No. 4383, dated 16th September 1879. The area of Kelapur has been carefully calculated, and appears to be 76 square miles.

(*b.*) The small teak tracts of Jalgaon, Mangla, and Renkapur, aggregating one square mile in area, which are in charge of the Deputy Commissioner, have been similarly transferred to District Reserves.

(*c.*) Fractions of square miles in acres exceeding half a square mile in amount have been treated as whole square miles, and account for a nominal increase of four square miles in the gross area.

(*d.*) Ten square miles of the Sonkas District Reserve in the Yeotmal Taluka have been transferred to the unreserved forest area under your No. 2846, dated 2nd June 1879, to the Deputy Commissioner, Wun.

The coppices in Buldana and Akola, alluded to in para. 10 of your memorandum on the Forest Report for 1878-79, are, for the sake of simplicity, still shown as District Reserves in Form 45, but to explain the distribution of the forest area in each taluka in Berar, I attach Appendix A. to this Report, which shows separately—

I.—Regular District Reserves.

II.—Coppices.

III.—Babul Buns.

As the continued reservation of some of the District Reserves, and the future administration of this class of forest as a whole is now under discussion, it is needless to allude further to the area of the present reserves.

The District Reserves are not specially demarcated, but the ordinary boundary-marks, have, it is understood, in all cases been maintained.

2.—*Protection and Improvement.*

Protection and improvement of Reserved District Forests.

48. As plans for introducing a more uniform system of management in District Reserved and Unreserved Forests are now under consideration, it is needless for me to dwell at length on the absence of method in the praiseworthy efforts that have been made in most districts to improve and protect the areas in question.

Prosecutions for breaches of rules in District Forests (excluding the Melghat) stood as follows:—

	Cases.	Convictions.
1879-80	133 ...	116

In the previous year the cases in District Forests were in some districts mixed up with those in State Forests, so exact comparison is impossible; but I find from the District Reports that there is a general decrease in the number of prosecutions.

As fire conservancy had so utterly failed in past years, I directed Deputy Commissioners in February last to sell the grazing in their Reserved Forests (this on the advice of the Deputy Conservator of Forests). Grazing is a less evil than fire.

Regular fire conservancy was nowhere attempted, and in most districts the District Reserves (excepting the babul buns) were burnt. As the fitful preservation of forests from fire does more harm than good, this is not to be regretted.

In the Ellichpur District the Deputy Commissioner reports favourably on the natural reproduction in the babul buns recently cut over, and notes that seed sown by hand in some of the buns has germinated well. The Deputy Commissioner also notes a curious fact in connection with the babul, *viz.*, that in some cases seed has germinated two and three years after it was sown. The Deputy Commissioner of Akola notices the very satisfactory condition of the Akola Babul buns, and the marked absence of illicit cutting within their boundaries; he attributes this chiefly to the law-abiding nature of Beraris, but some credit should, I think, be awarded to the District Forest Establishment, whose sole attention has been devoted for many years to these buns.

With the exception of babul buns in Ellichpur recently cut over, and the Patroat Forest in Wun, all the District Reserves appear to have been open for grazing during the past year.

3.—*Yield and Working.*

Yield of Reserved District Forests.

Deputy Conservator of Forests might have given the number of cart loads, bullock load, &c., for which they issued passes, and certainly should have been able to distinguish between the produce of reserved and unreserved forests.

* The pass system is very ineffective.

49. The yield of Reserved District Forests during the past year cannot well be separated from that of the Unreserved Forests, and is best shown by Appendix C attached to this Report. The plan at present in vogue for working District Forests does not seem to afford a large yield, judging by the number of passes* issued; but as grazing and wood lands are at present included under the same head, it is difficult to say whether these areas are unproductive or the reverse.

Ellichpur District.

50. In Ellichpur no babul buns were cut over last year, the stock in hand from previous years meeting all demands.

Amraoti District

51. In Amraoti no babul buns were cut over, the demand for fuel being fully met from private lands. In the Amraoti Hills one block of 6,956 acres was open for fuel cutting, but only Rs. 672 or about 1½ annas per acre, was realized. No passes were granted under District Forests, Rule I.; the sales under Rule IV. are noted above. Rule V. would appear to have been misunderstood or evaded in Amraoti, as it returned only Rs. 57. Return C. therefore affords no clue to the yield of the forests, or the demand for timber.

52. In Akola 110 acres of babul buns were cut over in 11 villages; the cuttings sold readily for Rs. 2,130, but no record of the out-turn was kept. Appendix C. shows that only 37 passes under District Forests, Rule I., and 664 under Rules IV. and V were issued, Rs. 568 being realized.

Akola District.

The Deputy Commissioner explains that the chief exports took place by head loads which are free, so that these figures again afford no basis for an estimate of the present demand on the district forests.

53. Some of the babul buns in Chikhli taluk were thinned; and the proceeds fetched Rs. 64. 78 passes for reserved timber and 606 passes for unreserved timber and minor forest produce were issued, and combined with free head-loads of fuel appear to have met the wants of the villagers. The yield of the forests in Buldana cannot, however, be ascertained.

Buldana District.

54. The reserves in Basim have been lightly worked, giving a money return for timber of Rs. 816. No record of the produce exported is available.

Basim District

55. The reserves in Wun District enjoy complete rest, the demand for timber of unreserved kinds being met by free grants from the unreserved forests, and timber depôts for the reserved woods having been established in the chief villages of the district as described last year.

Wun District.

The Deputy Commissioner reports that the south Wun villagers draw most of their timber from the Nizam's Territory and the Central Provinces, which seems to point to defective arrangements in our own forests. It is, however, possible that the wealthy Berari may find it easier to purchase wood from districts where want and competition promote cheap labour, rather than to cut wood at home, paying a nominal royalty but employing expensive labour.

I concur in this—*vide* para. 23 of my review for 1878-79.

4.—*Financial Results.*

56. I attach appendices B., C., and D., which explain the financial results of the administration of the district reserved and unreserved forests, but for convenience' sake have extracted the following figures regarding the district reserves in five districts:—

Financial Results.

Budget head.	Ellichpur District.	Amraoti District.	Akola District.	Buldana District.	Basim District.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Timber, &c., removed from forests by Government agency	...	...	...	..	...	..
II.—Timber, &c., removed from forests by purchasers ...	1,397	20,091	2,130	1,051	2,111	29,780
III.—Confiscated, &c., wood ...	...	...	...	...	...	...
V.—Miscellaneous ...	...	17	...	...	47	64
Total ...	1,397	23,108	2,130	1,051	2,158	29,844
Total expenditure under A. and B. ...	131	4,451	738	124	521	5,965
Surplus ...	1,266	18,657	1,392	927	1,637	23,879

The receipts are from figures given by Deputy Commissioners: the expenditure in reserved and unreserved forests, which is given by them collectively, is here apportioned, according to area, to the two classes of forest.

In future each reserved forest should if possible be treated as a separate entity and its produce, income and expenditure separately shown.

In Wun the revenue from reserved and unreserved forests is kept in one account and so cannot be separated. As the grazing in reserved and unreserved forests was in some cases shown last year as reserved forest grazing, no comparison can be instituted between these figures and those given in para. 73 of the Report for 1878-79.

SECTION III.—District Unreserved Forests.

1.—*Area and Boundary.*

57. The area of unreserved forest is shown in Form 45. It includes unleased culturable land, and the additions and reductions are chiefly due to the rise and fall of the cultivated area in each district.

Area of unreserved forests.

2.—*Protection and Improvement.*

58. The unreserved forests are managed under the Settlement Rules and District Forest Rules of 1874, and protection chiefly consists in the reservation of twelve kinds of trees and of the bamboo. The reserved wood can only be cut by special permission.

Protection and improvement generally.

The number of reserved trees should be approximately indicated by the number of passes issued under District Forest Rules I., II., and III., which are given in Appendix C., but it appears very doubtful if this record of passes affords any reliable data on the subject.

59. In the Melghat the unreserved forests are under the direct administration of the Forest Department. Reserved and unreserved kinds of timber may, subject to payment of dues on export, be cut by any one. Cattle can graze everywhere on payment of a license tax, and the forest be fixed, provided the reserved forests are not thereby endangered. Temporary cultivation (Dhya) with the permission of the Deputy Commissioner is allowed and practically has been unrestricted. The Melghat unreserved forests, extending over 927 square miles, are worked under this system to facilitate the strict reservation of Bairagarh and Gugamal, which aggregate 605 square miles. The result of such management has been a most marked improvement in the latter, and an equally pronounced deterioration in the former area. There is little reason to doubt the reserved forests of the Melghat will ultimately meet any demand that may be made on them, but grave doubts* have arisen with regard to the future of the unreserved forests.

Melghat unreserved forests.

It is very necessary that it should be restricted I understood, however, that the matter rests with the Assistant Commissioner and not with the Deputy Commissioner.

* In this I fully concur, and am glad that the Deputy Conservator's attention is directed to the question.

Unrestricted cutting and Dhya mean waste of material and wanton destruction of forest growth, for an utterly inadequate return in the way of cereals; and it seems desirable to stay this waste and destruction in the interests of the province in general as well as of the Kurkus of the Melghat.

The forest administration of the Melghat was the subject of attention during your visit to that taluka in March last, and the result was the adoption of tentative measures to control temporary cultivation and directions for the formulation of further proposals for the more exact management of these forests in the future. I trust the present year will witness the introduction of several important reforms in the administration of the Melghat. The Melghat unreserved forests will never be teak timber producing tracts, but they may, in perpetuity, be made equal to meeting the local demands for culturable and arable land, and for wood for household purposes; they should also help to provide fuel, charcoal, small timber and grazing to the Ellichpur and Akola Districts. The present enormous timber exports to Berar are well known.

In future reports more detailed information regarding the localities from which cattle come might, if practicable, be given. They would be of great interest to Revenue Officers.

With regard to grazing I may note that the Ellichpur and Akola Districts sent about 118,173 head of cattle to the Melghat in 1879-80.

3.—*Yield and working.*

Yield of Unreserved Forests.

60. A statement of the produce exported from the Melghat has been given in para. 16, and the only feature demanding especial note is the considerable increase in the export of timber:—

		1878-79.		1879-80.
Teak, tewus, seshum	...	104,979	...	119,641
Other kinds of wood	...	58,106	...	70,055
Bamboo	...	1,043,123	...	1,170,372

In accordance with your No. 1520, dated 2nd April 1880, I have after careful inquiry and the collection and compilation of all available data, given the out-turn of the Melghat in cubic feet, pounds, &c., and believe the figures are reliable. I regret the yield of the other unreserved forests in Berar cannot be ascertained.

4.—*Financial results.*

Financial results.

61. Appendices B., C., D. give the joint financial results of Reserved and Unreserved District Forests, but to place them more clearly before you I give below the revenue under the budget heads, and show the surpluses for comparison with last year's returns. I would note that the Wun figures include the reserve grazing fees, but that the other districts only show the unreserved forest grazing fees:—

Budget head.	Melghat.	Ellichpur.	Amraoti	Akola.	Buldana	Wun.	Basim.	Total.
II.—Timber, &c., removed by purchasers, &c.—								
(a).—Timber .. .	88,746	33	...	34	1,571	2,688	3,580	96,652
(b).—Firewood and charcoal ...	7,773	282	1,804	1,052	778	234	1,614	13,537
(c).—Bamboos	11,704	...	...	29	..	789	...	12,522
(d).—Grazing and fodder grass ...	6,574	3,861	41,170	18,916	15,764	24,150	5,248	1,15,683
(e).—Other minor produce	936	699	4,508	823	1,496	5,689	1,418	15,569
III.—Confiscated, &c., wood.—	121	1,077	23	14	299	340	...	1,874
V.—Miscellaneous.—								
(a).—Fines and forfeitures	12	...	10	...	6	7	...	35
(b).—Refunds	...	...	1	...	...	3	...	3
(c).—Other sources	578	...	1	800	4	68	64	1,514
Total ..	116,444	5,952	47,515	21,668	19,918	33,968	11,924	2,57,389
Total expenditure under A. and B. .	31,471	918	4,451	738	1,237	4,953	1,564	45,332
Surplus ..	84,973	5,034	43,064	20,930	18,681	29,015	10,360	2,12,057

The Melghat revenue has increased by 17,077, the heads showing increase being timber Rs. 14,000; bamboo, Rs. 2,000; grazing, Rs. 1,000. The revenue of the other unreserved forests has increased by Rs. 26,153, the heads showing increase being timber and fuel, Rs. 3,000; grazing, Rs. 21,000; other sources, Rs. 2,000.

SECTION IV.—General Remarks.

Experimental cultivation of exotic trees.

62. The *Grevillia robusta* is the only successful introduction among the many varieties of Australian and other foreign trees that have been tried, and through the kindness of Major Mackenzie, Deputy Commissioner of Ellichpur, we have been able to extend the experiment with some seed recently procured from Australia. The babul and neem plantations in the Melghat

have, I regret to report, failed, the frost having cut the young plants down; but renewed efforts are being made to raise these and other fodder trees.

Fines inflicted in Department.

63. Fines amounting to Rs. 120 were inflicted upon the subordinates of the Department for petty offences.

Health of establishment

64. The past year has not been abnormally unhealthy either in the hill or plain forests.

Notice of officers.

65. Forest charges in Berar were held as follows during the past year:—

Mr. A. T. Drysdale was chief Forest Officer in Berar, and had charge of the Northern Division up to January last, when he proceeded on leave, and Mr. Ballantyne held charge until the middle of February, when I relieved him.

Mr. Ballantyne held charge of the Melghat Forests during the entire year, and I cannot speak too highly of his administration. The Deputy Commissioner of Ellichpur writes as follows: "I think it my duty to point to the continued excellent relation which, with the happiest results, exist between the people and the forest officials under the immediate guidance of Mr. Ballantyne"

Mr. Prevost held charge of the Southern Division throughout the year. I trust greater method in the administration of his Division will in future reward his well known zeal with greater success.

Mr. Stewart was on special duty examining and mapping the district reserves and his work has, I believe, met with general approval.

I would bring the services of the following forest subordinates to your special notice:—

Ranger Rasul Khan, Amraoti District.
Do. Ahmed Ali, Bairagarh Reserve.
Do. Narain Dhondo, Gugamal Reserve.
Forester Munir-ud Din, Ghatbori Reserve.
Do. Misriprasad, Bairagarh Reserve.
Tikaram Gond, Road-maker in the Melghat.

I have the honour to be,

Sir,

Your most obedient Servant,

C. BAGSHAWE,

Officiating Conservator of Forests,

Hyderabad Assigned Districts.

APPENDICES.

FORESTS.

APPENDIX A.—*Statement showing Babul Buns, Coppices, District Reserved and Unreserved Forests.*

Forest Division.	District.	Taluk.	Area. Babul buns.	Area. Coppices.	Area. District Reserves.	Total.	Unreserved Forests.	Grand Total.
Northern Division.	Amraoti.	Amraoti ...	2,092	..	26,747	28,839	9,469	38,308
		Murtazapur ...	1,216	...	9,342	10,558	10,124	20,682
		Morsi	2,061	...	...	2,061	48,553	50,614
		Chandur ..	2,040	...	27,247	29,287	18,718	48,005
		Total ...	7,409	...	63,336	70,745	86,864	157,609
	Akola.	Akola	547	16,640	...	17,187	43,895	61,082
		Balapur ...	639	33,172	...	33,811	20,281	54,092
		Khamgaon ...	1,710	...	...	1,710	15,432	17,142
		Akot	1,254	...	...	1,254	6,797	8,051
		Jalgaon ...	1,525	...	...	1,525	23,693	25,218
		Total ...	5,675	49,812	...	55,487	110,098	165,585
	Ellichpur.	Ellichpur ...	2,154	...	...	2,154	23,591	25,745
		Daryapur ...	2,216	...	...	2,216	4,405	6,621
		Total ...	4,370	...	...	4,370	27,996	32,366
Southern Division.	Buldana.	Chikhli... ..	627	4,148	...	4,775	84,486	89,261
		Mehkar... ...	540	1,877	...	2,417	84,821	87,238
		Malkapur ...	550	8,717	...	9,267	27,263	36,530
		Total ...	1,717	14,742	...	16,459	196,570	213,029
	Wun.	Yeotmal ...	166	...	33,298	33,464	111,121	144,585
		Wun	25	...	22,549	22,574	153,968	176,542
		Darwha ...	1,780	...	38,818	40,598	202,289	242,887
		Kelapur ...	141	.	90,220	90,361	120,661	211,022
		Total ...	2,112	...	184,885	186,997	588,039	775,036
	Basim.	Basim	2,013	...	9,521	11,534	35,568	47,102
		Pusad	350	...	2,998	3,348	198,751	202,099
		Mangrul ...	300	...	15,531	15,831	67,503	83,334
		Total ...	2,663	...	28,050	30,713	301,822	332,535
		Grand Total ...	23,946	64,554	276,271	364,771	1,311,389	1,676,160

FORESTS.

APPENDIX B.—*Statement showing income realized by Civil Officers from Forests (Reserved and Unreserved) under their control in* 1879-80.

	Amraoti.	Akola.	Ellichpur.	Buldana.	Wun.	Basim.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Grazing sales, Rule XIV.	37,056 8 0	9,322 4 0	2,208 10 0	8,683 6 9	...	2,532 11 6
2. Do. „ XV.	16,194 0 0	4,189 4 0	1,365 8 0	143 0 0	...	313 10 0
3. Do. „ XVI.	7,486 0 0	5,305 0 0	287 0 0	7,925 11 6	...	2,401 9 4
4. Grazing cess	3,418 12 6	...	...	...	24,150 7 11	...
Total ...	64,155 4 6	18,816 8 0	3,861 2 0	16,752 2 3	24,150 7 11	5,247 14 10
5. Grazing in reserves	...	...	84 8 0	...	...	1,342 11 0
6. From sale of grass	...	99 6 0	...	...	...	...
7. Mango trees produce of	4,507 8 6	822 9 0	405 6 0	1,476 1 0	5,688 12 0	893 10 6
8 Mowha trees „			293 0 0			
9. Sale of cuttings in Babul buns	...	2,130 3 6	1,305 12 0	64 7 0	...	...
10. Minor forest produce	...	..	8 0 0	..	..	277 14 9
11. Passes under Rule I.	...	34 0 0	...	720 9 10	2,687 8 0	768 5 4
12. Do. „ III.	..	...	...	656 12 0	...	3,580 0 7
13. Do. „ IV.	671 11 6	222 7 6	...	...	...	...
14. Do. „ V.	57 3 0	345 3 6	...	433 13 9	...	1,614 3 8
15. Do. „ VI.	...	...	...	141 9 0	1,023 0 0	246 2 5
16. Sale of dry and decayed trees	1,180 10 9	1,284 1 6	1,358 8 6	..	...	11 10 0
17. Confiscated wood	23 3 9	14 10 3	...	298 8 9	339 10 0	47 8 0
18. Fines	10 2 6	...	...	12 5 4	...	...
19. Miscellaneous	17 0 0	29 7 0	32 15 6	412 8 1	78 3 0	52 4 0
Grand Total ...	70,622 12 6	23,798 8 3	7,349 4 0	20,968 13 0	33,967 8 11	14,082 5 1

FORESTS.

APPENDIX C.—*Statement showing the working of the Forest Rules.*

District.	District Forest acres.			Passes granted under Rule I.				Passes granted under Rule III.				Passes granted under Rules IV and V.				Passes granted under Rule VI.			
	Reserved.	Unreserved	Total.	Area in which granted.	Officer granting.	No. granted.	Amount realized.	Area in which granted.	Officer granting.	No. granted.	Amount realized.	Area in which granted.	Officer granting.	No. granted.	Amount realized.	Area in which granted.	Officer granting.	No. granted.	Amount realized.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs. a. p.				Rs. a. p.				Rs. a. p.				Rs. a. p.
Amraoti ...	70,745	86,864	157,609	...	...	..	...	...	...	...	...	...	Forest ranger and patels of 10 villages.	1,873	728 14 6	...	...	...	...
Akola ...	55,487	110,098	165,585	2,512	Patels of 31 villages.	37	34 0 0	...	...	...	...	129,956	Forest ranger and patels of 73 villages.	664	567 11 0	...	...	...	...
Ellichpur ...	4,370	27,996	32,366	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
Buldana ...	16,459	196,570	213,029	...	Forest ranger.	78	720 9 10	...	Patels of 55 villages.	429	656 12 0	...	Forest ranger and patels of 50 villages.	46	433 13 9	...	Patels of 10 villages.	131	141 9 0
Wun .	186,997	588,039	775,036	...	Tahsildar ...	...	2,687 8 0	...	...	...	...	...	...	...	...	...	...	...	1,023 0 0
Basim ...	30,713	301,822	332,535	14,882	Deputy Commissioner.	7	768 5 4	266,254	Patels of 82 villages.	562	3,580 0 7	301,822	Patels of 180 villages.	3,571	1,614 3 8	301,822	Patels of 23 villages.	40	246 2 5
Total ...	364,771	1,311,389	1,676,160	17,394		122	4,210 7 2	266,254		991	4,236 12 7	431,778		6,154	3,344 10 11	301,822		171	1,410 11 5

FORESTS.

APPENDIX D.—*Statement showing expenditure by District Officers on account of Forests in* 1879-80.

	Amraoti.	Akola.	Ellichpur.	Buldana.	Wun.	Basim.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Percentage to village officers for collecting grazing dues ...	4,898 10 3	...	55 12 3	1,715 3 10	240 8 6	216 14 9	7,127 1 7
Do. do. revenue on fruits	195 6 0	...	1 5 2	97 4 0	...	...	293 15 2
Do. do. passes, Rule I. ...							
Do. do. do., Rule IV. ...	16 14 5	...	...	68 4 11	...	...	85 3 4
Do. do. do., Rule V. ...							
Do. do. do., Rule VI. ...							
Total ..	5,110 14 8	...	57 1 5	1,880 12 9	240 8 6	216 14 9	7,506 4 1
I. Timber and other produce removed from the forests by Government agency:—							
(a.) Timber	...	...	...	...	...	...	...
(b.) Firewood and charcoal	...	..	...	...	...	...	...
(c.) Bamboos	...	...	...	...	...	...	...
(d.) Sandal wood	...	...	...	...	...	...	...
(e.) Grass and other minor produce	...	..	...	...	...	...	...
II. Timber and other produce removed from the forests by consumers or purchasers	1,227 11 11	...	152 7 5	260 13 6	401 6 4	...	*2,042 7 2
III. Confiscated, drift, and waif wood	...	...	...	...	...	...	...
IV. Revenue from forests not managed by Government:—							
(a.) Duty on foreign timber and other forest produce ...	...	...	...	...	...	...	...
(b.) Revenue from shared and private forests	...	...	...	...	...	...	...
V. Rent of leased forests and payments to share-holders in forests managed by Government	...	...	...	...	...	...	...
VI. Live and dead stock—							
(a.) Purchase of cattle	...	...	...	...	...	...	...
(b.) Feed and keep of cattle	...	...	...	...	...	...	...
(c.) Plant, tools, and instruments	239 10 0	...	...	...	...	...	239 10 0
VII. Communications and buildings—							
(a.) Roads and bridges	...	...	...	...	...	...	...
(b.) Buildings	...	...	...	...	0 9 0	...	0 9 0
(c.) Other works	...	...	...	...	...	29 4 0	29 4 0

VIII. Demarcation, improvement, and extension of forests:—							
(a.) Demarcation	...	...	...	...	5 1 0	...	5 1 0
(b.) Compensation for land and rights	...	...	...	...	...	...	...
(c.) Surveys and working plans	...	...	...	...	...	...	...
(d.) Plantations	...	1 0 0	8 0 0	...	...	...	9 0 0
(e.) Protection from fire	...	...	...	61 8 10	...	...	61 8 10
(f.) Other works	...	137 4 0	...	...	...	...	137 4 0
IX. Miscellaneous:—							
(a.) Refunds	...	...	...	...	...	...	...
(b.) Law charges	...	...	...	...	...	..	...
(c.) Other charges	20 13 0	6 15 0	...	...	878 2 3	...	905 14 3
I. Salaries:—							
(a.) Conservators	...	..	...	..	...	...	...
(b.) Superior officers	3,267 0 0	...	...	..	...	...	3,267 0 0
(c.) Subordinate Forest and Depôt Establishments ...	1,911 0 0	1,311 0 0	849 0 0	1,032 0 0	3,574 15 7	2,056 1 11	10,734 1 6
(d.) Office establishments	358 1 9	...	...	..	...	...	358 1 9
(e.) Deputation and special allowance	...	...	...	...	...	...	...
II. Travelling allowance:—							
(a.) Conservators	...	...	...	...	...	...	...
(b.) Superior officers	1,225 8 0	...	...	...	...	...	1,225 8 0
(c.) Subordinate Forest and Depôt Establishments ...	..	...	...	...	...	..	...
(d.) Office Establishments	47 14 5	...	...	...	...	...	47 14 5
III. Contingencies:—							
(a.) Stationery	58 2 0	...	3 12 0	...	1 8 0	...	63 6 0
(b.) Carriage of tents and records	319 5 8	...	...	...	...	...	319 5 8
(c.) Rents, rates and taxes	...	...	24 0 0	...	...	...	24 0 0
(d.) Pay of Police guards	...	...	...	...	...	...	...
(e.) Official postage	19 11 6	5 0 0	...	...	5 0 0	...	29 11 6
(f.) Sundries	207 1 11	15 0 0	12 0 0	6 7 0	85 8 0	...	326 0 11
Total ...	8,902 0 2	1,476 3 0	1,049 3 5	1,360 13 4	4,952 2 2	2,085 5 11	19,825 12 0
Grand Total ...	14,012 14 10	1,476 3 0	1,106 4 10	3,241 10 1	5,192 10 8	2,302 4 8	27,332 0 1

(1).—Pay of temporary establishment for protection of forests. (2).—Cost of cutting babul buns.

FORESTS.

ANNUAL FORM No. 45.—*Area of Reserved Forests*, 1879-80.

Division or Range.	Name of Forest.	Area on 1st April 1879.		Added during the year.		Excluded or transferred to other heads.		Total on 31st March 1880.		No and date of Notification of additions & transfers, &c.
		Square miles.	Acres.	Sq miles.	Acres.	Sq. miles.	Acres.	Sq miles.	Acres.	
	DEMARCATED STATE FORESTS.									
Northern Division.	*Ellichpur District, Melghat.*									
	Bairagarh Reserve	425	272,049	...	...	...	...	425	272,049	
	Gugamal do. ...	180	115,200	...	...	...	...	180	115,200	
Southern Division.	*Buldana District.*									
	Garumatergaon Reserve ...	71	45,992	†1	...	...	...	72	45,992	
	Akola, Basim, and Buldana Districts.									
	Ghatbori Reserve	37	23,840	...	...	...	...	37	23,840	
	Basim District.									
	Penganga Reserve	18	11,680	...	...	...	*105	18	11,575	
	Kinwat Reserve ...	84	54,236	†1	...	...	...	85	54,236	
	Wun District.									
	Kelapur Reserve.	50	32,000	...	...	50	32,000	...	...	
	Small tracts of Mangla, Jaolgaon, Renkapur and Dapura &c.	1	640	...	...	1	640	...	...	
	Reserved District Forests.									
Northern Division.	Ellichpur District.	6	4,360	†1	10	...	...	7	4,370	
	Amraoti do.	110	70,912	†1	6	...	173	111	70,745	
	Akola do.	86	55,485	†1	2	...	...	87	55,487	
Southern Division.	Buldana do.	26	16,928	..	58	...	527	26	16,459	
	Wun do.	225	144,141	77	49,342	10	6,486	292	186,997	
	Basim do.	47	30,642	†1	229	...	158	48	30,713	
	Total ...	1,366	878,105	83	49,647	61	40,089	1,388	887,663	

* 20 Acres 12 Guntas Excluded—vide Secy. for Berar's letter No 989, dated 2nd July 1879, to the Comr., H A D.,
85 " 0 " Excluded—vide Comr. H A D.'s No. 5239, dated 12th November 1879, to the Dy. Comr., Basim.
105 " 12 "

† Due to fractions of over half a square mile being shown as whole square mile.

Area of Unreserved Forests, 1879-80.

Division or Range.	Name of Forest.	Area on 1st April 1879.		Added during the year.		Excluded or transferred to other heads.		Total on 31st March 1880.	
		Square miles.	Acres.	Square miles	Acres.	Square miles.	Acres.	Square miles.	Acres.
Northern Division.	Ellichpur District. Melghat taluka and part of Ellichpur..	920	588,800	7	4,426	...	...	927	593,226
	Ellichpur District. Part of Ellichpur and Daryapur.	50	32,422	*1	...	7	4,426	44	27,996
	Amraoti Dist. ...	199	127,388	...	168	63	40,692	136	86,864
	Akola do ...	209	133,759	...	...	37	23,661	172	110,098
Southern Division.	Buldana District ...	292	186,840	15	9,730	...	...	307	196,570
	Wun do. ...	998	638,831	...	...	79	50,792	919	588,039
	Basim do. ..	429	274,884	46	29,207	3	2,269	472	301,822
	Total ...	3,097	1,982,924	69	43,531	189	121,840	2,977	1,904,615

* Due to fractions of over half a square mile being shown as whole square mile.

FORESTS.

ANNUAL FORM No. 46.—*Area of Plantations*, 1879-80.

Division.	Name of Plantation	On 1st April 1879.		During 1879-80.		On 31st March 1880.		Remarks.
		Area.	Total cost.	Area added.	Cost.	Total area.	Total cost.	
		Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	
Northern Division.	*Bairagarh Reserve.*							
	Pili	52	2,058	...	...	52	2,058	Teak.
	Rakiadoh	13	1,983	...	180	13	2,163	Teak & bamboo.
	Sembadoh	2	28	...	...	2	28	Do.
	Dugapati	11	435	...	...	11	435	Do.
	Pipalcota	160	5,083	...	...	160	5,083	Do.
	Saoli	110	4,610	...	250	110	4,860	Do.
	Bujru	31	2,199	...	60	31	2,259	Do.
	Labu	279	3,972	...	..	279	3,972	Teak.
	Saoli and Korita ...	30	2,233	...	...	30	2,233	Do.
	Jambulwari	600	4,325	...	...	600	4,325	Do.
	Abapur	120	4,849	...	223	120	5,072	Do. & bamboo.
	Kolkaz	1	320	...	...	1	320	Bamboo.
	Ramiaola	...	535	...	100	...	635	Teak.
	Kurita	...	433	...	82	..	515	Do.
	Nurseries	3	1,398	...	330	3	1,728	
	Bibabalda	...	...	...	1,020	...	1,020	
	Total ..	1,412	34,461	..	2,245	1,412	36,706	
	Amraoti District.							
	Bhiwapur	...	150	...	...	..		
	Cherori	...	300	...	...	...		
	Mahdeokora	..	38	...	...	...		
	Seoni khurd	...	228	...	...	...	4,200	Failed.
	Amraoti	...	3,005	...	...	..		
	Barmi	..	286	...	...	...		
	Morgaon	...	151	...	...	...		
	Jawer	...	42	...	...	...		
	Lontek	92	254	..	...	92	254	Babul
	Total ...	92	4,454	...	..	92	4,454	
Southern Division.	Experimental plantations in South Berar ...	...	906	...	...	...	906	Anjan Teak and Babul.
	Kinwat Reserve ...	434	1,206	...	978	...	2,184	Destroyed by frost.
	Total ...	434	2,112	...	978	...	3,090	
	Grand Total .	1,938	41,027	...	3,223	1,504	44,250	

FORESTS.

ANNUAL FORM No. 47.—*Area of Forest tracts protected from fire during dry season*, 1879-80.

Division.	Forest tracts.	Up to 30th June 1879.		During dry season of 1879-80				Total cost up to 30th June 1880.	Year when protection commenced.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures	Actually protected.	Amount expended.		
		Acres.	Rs.	Acres	Acres.	Acres.	Rs	Rs.	
Northern Division.	Melghat Raipur block of the Bairagarh Reserve	14,231	5,240	14,231	...	14,231	528	5,768	1870
	Remainder of the Bairagarh Reserve	257,558	1,478	257,818	1,280	256,538	1,130	2,608	1872
	Gungamal Reserve ..	187,520	1,691	115,200	...	115,200	251	1,942	1877
	Total ...	459,309	8,409	387,249	1,280	385,969	1,909	10,318	
Southern Divn.	Garumatergaon Reserve .	35,992	1,422	45,992	5,800	40,192	425	1,847	Imperfectly protected.
	Ghatbori do.	6,640	882	23,840	11,460	12,380	321	1,203	Do.
	Pengangado.	2,700	974	11,575	1,200	10,375	212	1,186	Do.
	Kelapur do.	..	345	.	...	...	..	345	Do.
	Kinwat do.	50,396	1,272	54,236	44,900	9,336	305	1,577	Do.
	Total ..	95,728	4,895	135,643	63,360	72,283	1,263	6,158	
	Grand Total	555,037	13,304	522,892	64,640	458,252	3,172	16,476	

Charged in previous years	...	12,898
Do. 1879-80	...	2,685
Do. 1880-81	...	893
Total	...	16,476

ANNUAL FORM No. 48.—*Prosecutions for breaches of Forest Rules*, 1879-80

Forest Division and Civil District	Injury to forests by fire		Unauthorized felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited		Other offences.		Total.			
									Prosecutions.		Convictions.	
	Cases.	Persons.	Cases.	Persons.	Cases	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.
Ellichpur District..	2	6	13	33	5	11	27	60	17	110	33	70
Amraoti do. ...	...	..	14	40	...	..	...	.	14	40	14	40
Akola do. ...	...	...	105	189	...	...	2	11	07	200	96	166
Buldana do. ...	..	...	8	17	1	13	6	13	15	43	11	26
Wun do. ...	1	2	15	23	1	2	...	...	17	27	14	24
Basim do. ...	1	13	22	34	...	...	5	8	28	55	24	51
Total ...	4	21	177	336	7	26	40	92	228	475	192	377

FORESTS.

ANNUAL FORM No. 49.—*Summary of Revenue of the different Divisions*, 1879-80.

Budget Head Receipts.	Direction.	Northern Division. Rs. a. p.	Southern Division. Rs. a. p.	Total. Rs. a. p.
I.—*Timber and other produce removed from the forests by Government Agency :—*				
a. Timber	...	791 8 0	...	791 8 0
b. Firewood and charcoal	...	...	...	...
c. Bamboos	...	6 0 0	...	6 0 0
d. Sandal-wood	...	...	...	...
e. Grass and other minor produce ...	...	...	...	...
II.—*Timber and other produce removed from the forests by consumers or purchasers :—*				
a. Timber	..	94,463 13 3	7,571 12 2	1,02,035 9 5
b. Firewood and charcoal	...	14,292 2 3	2,674 13 6	16,966 15 9
c. Bamboos	...	17,970 4 5	837 13 9	18,808 2 2
d. Grazing and fodder grass	...	98,064 13 8	47,906 7 6	1,45,971 5 2
e. Other minor produce	...	9,001 6 7	9,783 8 3	18,784 14 10
III.—*Confiscated, drift and waif-wood* ...	...	1,264 9 6	643 6 9	1,908 0 3
IV.—*Revenue from forests not managed by Government—*				
a. Duty on foreign timber and other forest produce	...	...	...	...
b. Revenue from shared and private forests.	...	...	...	...
V.—*Miscellaneous :—*				
a. Fines and forfeitures	...	51 14 6	12 10 0	64 8 6
b. Refunds	...	...	10 0 3	10 0 3
c. Other sources	...	1,641 10 9	512 3 10	2,153 14 7
Total Receipts ..	...	2,37,548 2 11	69,952 12 0	3,07,500 14 11

Summary of Expenditure of the different Divisions, 1879-80.

BUDGET HEADS.—A—Conservancy and Works.	Direction.	Northern Division. Rs. a. p.	Southern Division. Rs. a. p.	Total. Rs. a. p.
I.—*Timber and other produce removed from the forests by Government Agency—*				
a. Timber	...	32 3 6	...	32 3 6
b. Firewood and charcoal	...	...	...	...
c. Bamboos	...	...	...	...
d. Sandal-wood	...	...	...	...
e. Grass and other minor produce ...	.	...	...	...
II.—*Timber and other produce removed from the forests by consumers or purchasers* ...	...	3,905 15 8	662 3 10	4,568 3 6
III.—*Confiscated, drift and waif wood*... ...	...	...	...	...
IV.—*Revenue from forests not managed by Government—*				
a. Duty on foreign timber and other forest produce	...	...	...	...
b. Revenue from shared and private forests.	...	...	...	...
V—*Rent of leased forests and payments to shareholders in forests managed by Government* ...	...	17,119 12 0	...	17,119 12 0
VI.—*Live stock, Stores, Tools and Plant :—*				
a. Purchase of cattle	...	3,250 7 6	...	3,250 7 6
b. Feed and keep of cattle	...	1,395 5 3	990 6 7	2,385 11 10
c. Stores, tools and plant	...	431 13 0	336 4 0	768 1 0
VII.—*Communications and Buildings—*				
a. Roads and bridges	...	3,693 3 6	342 7 0	4,035 10 6
b. Buildings	...	1,025 10 8	72 9 0	1,098 3 8
c. Other works	...	216 12 11	29 4 0	246 0 11
VIII.—*Demarcation, improvement and extension of forests :—*				
a. Demarcation	...	387 7 9	260 0 9	647 8 6
b. Compensation for land and rights ...	...	40 0 0	...	40 0 0
c. Surveys and working plans ...	...	..	...	..
d. Plantations	...	2,604 13 0	978 2 6	3,582 15 6
e. Protection from fire	...	1,437 7 3	1,309 3 5	2,746 10 8
f. Other works	...	676 2 3	...	676 2 3
IX.—*Miscellaneous:—*				
a. Refunds	...	24 7 0	...	24 7 0
b. Law charges	...	...	...	...
c. Other charges	..	914 0 11	215 14 10	1,129 15 9
Carried over, Total A.—Conservancy and Works...	...	37,155 10 2	5,196 7 11	42,352 2 1

FORESTS.

ANNUAL FORM No. 49.—*Summary of expenditure of the different Divisions,* 1879-80.—(*Contd.*)

BUDGET HEADS.—B—Establishments.	Direction.	Northern Division. Rs.	a.	p.	Southern Division. Rs.	a.	p.	Total. Rs.	a.	p.
Brought forward, Total A. Conservancy and Works...	...	37,155	10	2	5,196	7	11	42,352	2	1
I.—*Salaries* :—										
a. Conservators	...	...			...			...		
b. Superior Officers	...	15,928	11	2	4,200	0	0	20,128	11	2
c. Subordinate Forest and Depôt Establishments.	...	19,174	8	10	11,229	5	11	30,403	14	9
d. Office Establishments	...	5,825	8	11	1,262	7	8	7,088	0	7
e. Deputation and Special Allowances ...	...	...			...			...		
II.—*Travelling Allowances* :—										
a. Conservators	...	...			...			...		
b. Superior Officers	...	4,386	9	0	1,074	10	0	5,461	3	0
c. Subordinate Forest and Depôt Establishments.	...	29	2	6	...			29	2	6
d. Office Establishments	...	404	14	3	270	7	5	675	5	8
III.—*Contingencies* :—										
a. Stationery	...	466	10	0	34	9	0	501	3	0
b. Carriage of tents and records	...	1,256	10	3	413	0	0	1,669	10	3
c. Rents, rates, and taxes	...	122	0	0	...			122	0	0
d. Pay of police guards	...	520	13	0	...			520	13	0
e. Official postage	...	390	9	0	87	11	9	478	4	9
f. Sundries	...	617	8	1	159	11	4	777	3	5
Total B. Establishments ..	...	49,123	9	0	18,731	15	1	67,855	8	1
Grand Total of Expenditure ..	...	86,279	3	2	23,928	7	0	1,10,207	10	2

Dr. ANNUAL FORM No. 50.—*Account Current for the year* 1879-80. *Cr.*

	Rs.	a.	p.	Rs.	a.	p.		Rs.	a.	p.	Rs.	a.	p.
To cash in hand on 1st April 1879—							By expenditure of the Department—						
Northern Division..	3,611	15	9				Northern Division..	86,279	3	2			
Southern do.	...						Southern do.	23,928	7	0			
				3,611	15	9					1,10,207	10	2
To revenue received—							By remittances to State Treasuries—						
Northern Division..	2,37,548	2	11				Northern Division..	2,37,548	2	11			
Southern do.	69,952	12	0	3,07,500	14	11	Southern do.	69,765	12	0			
To remittances from State Treasuries—											3,07,313	14	11
Northern Division..	92,350	9	5				By advances made—						
Southern do.	24,502	4	7	1,16,852	14	0	Northern Division..	15,866	9	9			
							Southern do.	4,331	6	8	20,198	0	5
To remittances by transfer from other Departments ...	87	6	6	87	6	6	By supplies between Berar and Imperial Government account current with Government of N. W. Provinces ...	1,116	2	0	1,116	2	0
To advances recovered—													
Northern Division..	12,076	11	11				By cash balance in hand on 31st March 1880—						
Southern do.	3,507	9	7	15,584	5	6	Northern Division..	5,071	9	2			
To amount of Uncovenanted Service Family Pension Fund, as shown in Northern Division cash accounts	269	12	0	269	12	0	Southern do.	...			5,071	9	2
Total ...	...			4,43,907	4	8	Total ..				4,43,907	4	8

FORESTS.

ANNUAL FORM No. 51.—*Statement of outstandings and liabilities on account of Contractors (or Disbursers) for* 1879-80.

Division.	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department outstandings.	By Department liabilities.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Northern ...	...	12,076 11 11	12,076 11 11	1,643 10 3	15,866 9 9	17,510 4 0	5,433 8 1	...
Southern ...	...	3,507 9 7	3,507 9 7	878 12 6	4,331 6 8	5,210 3 2	1,702 9 7	...
Total ...	...	15,584 5 6	15,584 5 6	2,522 6 9	20,198 0 5	22,720 7 2	7,136 1 8	...

ANNUAL FORM No. 52.—*Statement of outstandings on account of Revenue,* 1879-80.

Division.	Particulars	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Northern ...	...	6 9 0	790 15 0	797 8 0	797 8 0	...
Southern ...	...	187 0 0	...	187 0 0	*187 0 0	...
	Total ..	193 9 0	790 15 0	984 8 0	984 8 0	...

* Written off as irrecoverable—*vide* No. 870, dated 19th June 1879, from the Secretary for Berar to the Resident to the Commissioner, Hyderabad Assigned Districts.

ANNUAL FORM No. 55.—*Statement of Timber and other produce brought to Depôt from the different Forest Divisions,* 1879-80

Division.	Forest.	Discription of Timber, &c.	No. of Pieces.	No. of Cubic feet.	Total of each Division. Pieces.	Total of each Division. Cubic feet.	Remarks.
Northern ...	Bairagarh	Teak ..	1,696	2,770	1,696	2,770	
		Bamboos ...	600	...	600	...	
		Total .	2,296	2,770	2,296	2,770	

ANNUAL FORM No. 56.—*Account of Timber and other produce,* 1879-80.

Particulars.	Pieces. No.	Pieces. Cub. ft.	Total. No.	Total. Cub. ft.	Particulars.	Pieces. No.	Pieces. Cub. ft.	Total. No.	Total. Cub. ft.
Northern Division									
Teak	...	...	..	...					
Balance ...	...	...	...	...					
Received during the year ...	1,696	2,770	1,696	2,770	Removed ...	1,696	2,770	1,696	2,770
					Balance ...	...	...	...	...
Total ..	1,696	2,770	1,696	2,770	Total ..	1,696	2,770	1,696	2,770
Bamboos ..	...	...	...	...					
Balance ...	...	...	...	...					
Received during the year ...	600	...	600	...	Removed ...	600	...	600	...
					Balance ...	...	...	...	...
Total ...	600	...	600	...	Total ...	600	...	600	...

FORESTS.

ANNUAL FORM No. 57.—*Statement showing the amount realized on account of the different classes of timber and other produce sold during* 1879-80.

Division.	Description of timber, &c.	Number of pieces, &c., sold.	Cubic contents.	Amount realized and due on account of sales.	Average amount per log, &c.	Average cubical contents of logs.	Average amount per cubic foot.
		Rs.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Northern.	Teak ...	1,696	2,770	784 15 0	0 7 0	...	...
	Bamboos .	600	...	6 0 0	1 per 100	...	...
	Total ...	2,296	...	790 15 0	...	...	...
Deduct—							
Amount due but not realized during year...				...			
Balance ...				790 15 0			
Add—							
Amount realized on account of former years.				6 9 0			
Total shown as revenue on account of sales under Budget head ...				797 8 0			

ANNUAL FORM No. 60.—*Abstract showing the value of Timber and of Live and Dead Stock for the year* 1879-80.

Description of timber and other stock.	On hand at the commencement of the year.		Received during the year.		Total.		Sold otherwise, disposed of and lost during the year, and allowance for depreciation.		On hand at close of year.		Cause of loss and other particulars.
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
				Rs. a. p.		Rs. a. p.		Rs. a. p.			
Northern Division.											
Teak ...	...	...	1,696	784 15 0	1,696	784 15 0	1,696	784 15 0	...	...	
Bamboos...	...	...	600	6 0 0	600	6 0 0	600	6 0 0	...	...	
Total ...	...	...	2,296	790 15 0	2,296	790 15 0	2,296	790 15 0	...	...	

C. BAGSHAWE,
Offg. Conservator of Forests,
Hyderabad Assigned Districts.

The 22nd July 1880

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No. 426 of 1881-82.

From

CECIL BAGSHAWE, Esq.,

Offg. Conservator of Forests,

Hyderabad Assigned Districts,

To

The COMMISSIONER,

Hyderabad Assigned Districts.

Dated Amraoti, 17*th August* 1881.

Sir,

I have the honour to submit the Progress Report of Forest Administration in the Hyderabad Assigned Districts for the year 1880-81.

CHAPTER I.—General Summary.

1.—*Area and Boundaries.*

Forest area of the province.

1. Considerable changes in the classification of the forest area of the province have taken place during the year, of which an abstract is given on the margin. The area of the State Reserves has been increased by the transfer of the Amraoti Hills and Kelapur District Reserves, and the formation of a small State Reserve at Chickalda. The only reduction in area is in Kinwat and Ghatbori, where three square miles have been given up for grazing.

Description of Forest.	Area in square miles.				Percentage of forest area to area of province.	
	On 1st April 1880.	Added during year exclusive of inter-divisional transfers.	Excluded and transferred during year exclusive of inter-divisional transfers.	On 31st March 1881.	On 31st March 1880.	On 31st March 1881.
State Reserves	817	146	3	960	5·1	6·0
District Reserves ...	571	27	172	426	3·5	2·6
Do. Unreserves ...	2,977	54	161	2,870	18·5	17·9
Total ...	4,365	227	336	4,256	*27·1	26·5

* Differs from the figures given last year owing to the change in the area of the province.

The District Reserves have been reduced by the transfer alluded to above, but have gained 27 square miles by the addition of some permanent grass lands (rumnas) and babul woods (buns), hitherto erroneously shown in the unreserved area. The unreserved district forests have been reduced by 129 square miles owing to the increase in cultivation.

The relative percentages of the different classes of forest to the area of the province are of less interest than usual owing to the state of transition the State and District Reserves are still in. The District Forests are also under radical re-organization.

Boundary lines and marks.

2. The old boundary lines and marks have been kept in order, and the new reserves been demarcated by stone pillars and cut lines.

Distribution of forest area into forest charges.

3. The question of forest charges in Berar has been under discussion, and sanction been accorded to the formation of four divisions in place of the old Northern and Southern Divisions. Of these, the organization of the Melghat Division has been completed, and that of Wun, begun in January 1881, has

been completed since the close of the year, while the sub-division of the Southern or South Berar Division has had to be postponed pending the appointment of a new junior officer. At the same time the compilation of accounts and other data in connection with the District Forests has been transferred to the office of the Conservator.

As soon as another Sub-Assistant Conservator is posted to the province, the best arrangement of the forest charges will probably be found to be

	Charges.	Probable area
(1.) *Melghat Division*—		
Staff—1 Deputy or Assistant. 1 Sub-Assistant.	Melght Reserves	634
	Do. Unreserves	900
	Ellichpur do.	12
	Akola do.	9
	Total ...	1,555
(2.) *Purna Division*—		
Staff—1 Deputy or Assistant.	Amraoti Reserve	78
	Do. Unreserves	11
	Akola Reserves	61
	Buldana do.	98
	Total ...	248
(3.) *Basim Division*—		
Staff—1 Sub-Assistant ...	Basim Reserves	133
(4.) *Wun Division*—		
Staff—1 Assistant	Wun Reserves	167

As soon as these charges are thoroughly organised it may be possible, by placing the divisional officers under Deputy Commissioners in respect to District Forests, to include the management of a considerable portion of the District Forests and road and grove arboriculture in the divisional charges.

2.—*Protection and Improvement.*

New Forest rules.

4. The Government of India having approved of the proposal to apply the Indian Forest Act VII. of 1878 to Berar, the preparation of rules under this Act is in progress, and their early submission for sanction is anticipated.

Prosecutions for breaches of Forest rules

5. The prosecutions under the forest rules were as follows:—

	1879-80.		1880-81.	
	Cases.	Convictions.	Cases.	Convictions.
State Reserves...	22	17	27	22
Unreserved Forests included in Forest divisions	73	59	161	137
District Forests	133	116	152	121
Total...	228	192	340	280

The average number of cases during the past five years was 290, so that these figures show an increase during the year of 50 over this average, and of 112 over the figures of the previous year. The prosecutions seem to call for no notice in detail; they were all petty in nature, and the percentage of convictions has not materially varied from that of past years.

Forest rights in Reserved Forests.

6. During the year the measures alluded to in para. 10 of last year's Report, *viz.*, the permanent establishment of the black-soil villages within the Bairagarh Reserve, &c., have made considerable advance, and all other outstanding questions have been settled.

Protection of the Reserves from fire.

7. The past fire season is one of the most satisfactory on record: the results are abstracted below :—

	Area of reserves on 31st March 1881.	Average area protected for four years, 1877 to 1880	Area protected in 1881.
Melghat Division .. Bairagarh, exclusive of area transferred to Central Provinces in 1879.	272,049	270,526	271,688
Melghat Division .. Gugamal, exclusive of area transferred to unreserved forest in 1879 ...	115,200	111,520	114,957
Melghat Division .. Chikalda	*2,400	...	2,400
Amraoti Range—Amraoti Hills	*49,847	...	9,008
South Berar Division .. Garumatergaon	45,992	41,049	44,692
South Berar Division .. Ghatbori	23,760	12,991	22,840
South Berar Division .. Penganga	11,575	7,824	10,125
South Berar Division .. Kinwat	52,558	32,727	51,752
Wun Division—Kelapur	*40,747	...	28,216
Total area of State Reserves on 31st March 1881 ..	614,128		
Deduct area of new reserves...	92,994		
Approximate area attempted and protected from 1877 to 1880	521,134	476,637	
Add additional area attempted in 1881	43,458		
*Chikalda 2,400, Amraoti 9,408, Kelapur 31,650.			
Total area attempted and protected in 1881 ...	564,592	...	555,678

It will be seen that the average area of failures in the past four years in reserves now under protection has been 44,507 acres, against 8,914 in the present season; or that 1·6 per cent. of the attempted area has been burnt, against a previous 8·5 per cent. The average cost of fire conservancy for four years has been Rs 2,699, against Rs. 3,129 this year. Of this increase, Rs. 208 is debitable to the 43,458 acres newly taken up, and the remainder to increased expenditure in South Berar, which has been fully repaid by the success attained.

Planting operations.

8. The extension of planting operations has been deferred until the demarcation of the reserves is completed, and success in the protection of the forests from fire more distinctly insured, the grant hitherto made for the plantations being diverted to the work alluded to above, and the improvements of communications. That it is sound policy, when only a small staff of officers is available to direct the entire energy of the department to the completion of the important work of demarcation, cannot be denied; and when the wonderful results of protection from fire are generally attained and appreciated, the delay in pushing on the artificial improvements of our forests may prove to have been the truest economy.

Creeper cutting.

9. Creeper cutting operations have been confined to the Bairagarh Reserve, where a considerable area has been cleared. The results of previous cuttings are most satisfactory.

Communications in the Reserves

10. The work of opening out new lines of road and improving old tracks in the reserves on any large scale must, of course, follow the construction of main lines of road running through or near the Reserves by the Public Works Department. In the Melghat the Ellichpur-Pili road, now rapidly approaching completion, forms the main line of communication, and a scheme for the construction by the Forest Department of a series of feeder roads starting from the above and running

through the Bairagarh and Gugamal Reserves, has been approved of by the Resident, and a grant to carry the works out will now be annually applied for. The scheme proposes the construction of 165 miles of new road, and the improvement for cart traffic of 64 miles of old cattle tracks, and will, when completed, render the Melghat one of the most accessible of hilly tracts.

In South Berar, the Basim-Pusad road and Umarkhed branch of the same, have already opened up the Penganga Reserve, and ultimately will enable us to open up cart communication with Kinwat. Similarly, the main lines of road in Wun, Akola, and Buldana, will all form main lines for the export of forest produce; and all that is required is the gradual development of a cheap system of forest roads to and through the reserves, to be taken in hand as the main lines are completed, and when they are likely to become remunerative.

3.—*Yield and Working.*

Yield of the Berar Forests in general.

11. In Appendix E will be found a statement of the yield of the State Reserves and Unreserves directly under Forest officers. Most of the District Reserved Forests have been in course of re-demarcation previous to their transfer to the new forest divisions; hardly any fellings have been made therein, and most of the revenue has been realised from auction sales of grass and grazing.

With reference to the District Unreserved Forests it is simply impossible to get correct registers of yield, &c., kept until a new classification of the area has been carried out.

Proposals for working the Reserves in the Melghat and Plains of Berar.

12. During the year the subject of working the Melghat Reserves has been under consideration, and some valuation surveys were begun in the blocks in which it is proposed the first fellings should be made. The result of these surveys is attached in Appendix H., and a special report on the subject will shortly be submitted.

There is no intention at present of working the Reserves in the plains of Berar.

4.—*Financial Results.*

Financial results.

13. The financial results of the year are as follows:—

		Revenue.	Expenditure.	Surplus.	Deficit.
		Rs.	Rs.	Rs.	Rs
Direction Office.	Direction ...	484	19,550	...	19,066
	District Reserved Forests ...	35,358	6,894	28,464	...
	Do. Unreserved do. ...	1,15,273	16,187	99,086	...
	Amraoti Range State Forests ...	59	1,917	...	1,858
	Wun Division Divisional office ..	...	5,003	...	5,003
	Do. State Forests ...	15	1,592	...	1,577
South Melghat Division.	Divisional office	172	11,924	...	11,752
	State Reserves	8,733	19,416	...	10,683
	Unreserved Forests	1,02,164	28,600	73,564	...
South Berar Division.	Divisional office	262	10,155	...	9,893
	State Reserves	4,036	7,708	...	3,672
	Total ...	2,66,556	1,28,046	2,01,114	63,504
	Deduct deficit ...			63,504	
	Net surplus ...			1,37,610	

or if the Direction and Divisional offices' receipts and charges are divided equally among the different classes of forest they stand thus:—

Class of Forest.	Revenue.		Expenditure.		Surplus.		Deficit.	
	1879-80.	1880-81.	1879-80.	1880-81.	1879-80.	1880-81.	1879-80.	1880-81.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
State Reserves ...	20,268	13,149	47,186	46,177	...	...	26,918	33,028
District Reserves, except Wun ..	29,844	35,664	11,827	22,438	18,017	13,226	...	...
Unreserved Forests	2,57,389	2 17,743	51,194	60,331	2,06,195	1,57,412	...	...
	3,07,501	2,66,556	1,10,207	1,28,946	2,24,212	170,638	26,918	33,028
				Deduct deficits ...	26,918	33,028		
				Net results ...	1,97,294	1,37,610		

Compared with the averages of the previous five years they appear to be:—

		Revenue. Rs.		Expenditure. Rs.		Surplus. Rs.
1875-76 to 1879-80	...	2,71,651	...	95,062	...	1,76,589
1880-81	...	2,66,556	...	1,28,946	...	1,37,610
Decrease	...	5,095	Increase	33,884	Decrease	38,979

Compared with 1879-80 :—

		Revenue.		Expenditure.		Surplus.
1879-80	...	3,07,501	...	1,10,207	...	1,97,294
1880-81	...	2,66,556		1,28,946	...	1,37,610
Decrease	...	40,945	Increase	18,739	Decrease	59,684

The variations in the proportional charges and receipts of the different classes of forest are chiefly matters of account. It has hitherto been the rule to distribute the charges rateably, according to area, &c., to each class of forests; this year, as far as possible, the actual charges are shown, and when office charges are added they have been divided equally between the three classes.

The fall in revenue is accounted for thus:—

	Rs.	
(a) District Forests 1879-80	1,70,789	
Do. do. 1880-81	1,50,631	
Decrease ...		20,158

Due to a fall in the grass and grazing sales of Rs. 23,031, against which has to be set an increase under fuel and miscellaneous collections of Rs. 2,873.

(b) In the Reserved and Unreserved Forests in the Melghat, which now forms the Melghat Division, in 1879-80 ...	1,35,778	
Melghat Division in 1880-81	1,11,069	
Decrease ...		24,709

Resulting from a decrease in timber sales of Rs. 33,077, in part counter-balanced by an increase under bamboos and grazing, &c., of Rs. 8,368.

Total decrease	...	44,867

In the Southern Division there was an increase in grass sales of Rs. 3,364, and in the Direction office, Amraoti Range, and Wun Division, an increase under miscellaneous receipts of Rs. 558.

Total increase	...	3,922
Net decrease in revenue	...	40,945

The increase in expenditure is divided as follows:—

	Rs.
Increase under working charges, Head A.	14,983
Establishment charges, Head B. ...	3,756
Total ...	18,739

The principal heads of increase are:—

Under A. II.—Fees to Patels and Patwaris paid in 1880-81 from the budget grant instead of by deductions from the collections, increased payment over previous year	9,677
Increased expenditure on roads and fire conservancy	3,710
For refund of grazing revenue on account of short rain-fall	1,596
Increase under A. ...	14,983

Increase under B. I.—Salaries to Messrs. Ballantyne and Prevost on promotion ...	2,200
On transfer of the Amraoti Hills Reserve establishment from A. II. to B. I. C....	583
B. II. and B. III., Travelling allowances and contingencies.—Additional expenses in connection with forming new divisions, printing vernacular forms, additional camp for probationer, moving Forest office head-quarter stations, &c.	973
Increase under B. ...	3,756

The decrease in the revenue is to a great extent of a temporary character, the large fall in grazing collections being due to the grass famine, consequent on the light rain-fall, while the decrease under timber sales is due partly to a smaller demand, partly to the unreserved forests of the Melghat having been stripped of large timber. The decrease under timber sales will probably be made good by working the Bairagarh Reserve, while it is doubtful if the grazing revenue will recover, as the tendency of recent arrangements regarding grazing is to reduce instead of enhance the dues levied. The increase in charges is more or less permanent.

Transactions of the year exhibited under main heads of revenue and expenditure.

14. The form below exhibits the receipts and charges of the year under main budget heads:—

Heads.	Receipts.		Charges.	
		Rs.		Rs.
I. Departmental timber operations		512	I.	103
II. Other revenue ...	II, III and V.	2,66,044	II, III, V, IX, 75 per cent., VI and B.	92,324
III. Formation, protection, and improvement of forests	...	...	VII, VIII, 25 per cent. VI and B.	36,519
	Total ..	2,66,556		1,28,946

CHAPTER II.—Reserved Forests.

(a).—DEMARCATED STATE FORESTS.

1.—*Area and Boundaries.*

Melghat Division.

15. The State Forests of the old Northern Division have been transferred to the Melghat Division, as sanctioned by *Residency Order* No. 1, dated 3rd January 1881, and a small Reserve of four square miles round the station of Chikalda, sanctioned by your No. 115,* dated 12th January 1880, has been added to the old reserves. Dry stone masonry pillars have been erected round the new reserve, and the Gugamal Reserve pillars have been renewed.

* To address of Deputy Commissioner, Ellichpur.

The demarcation of the proposed Jiri Reserve (alluded to in para. 5 of last year's Report), area 25 square miles, is now the only outstanding question with regard to reserves in this division, and the Ellichpur District.

Amraoti Range.

16. Pending the receipt of final orders regarding the formation of two divisions in South Berar, the Amraoti Range has been administered by the Officiating Conservator, and is therefore shown separately. The scheme for forming the Amraoti Hills Reserve, alluded to in para. 4 of last year's Report, has, after certain modifications made with the object of simplifying its provisions, been sanctioned; and the following areas have been demarcated and transferred to the direct management of the Forest Department:—

	Acres.
Closed Reserve—Bhiwapur block...	4,356
Do. Chiroree do.	5,052
Do. Rumna do.	8,536
Open Reserve	31,904
Total area, Amraoti Hills Reserve ...	49,848

Dry stone pillars, 479 in number, have been erected round the closed blocks, at a cost of Rs. 996, and a forty feet line, 42 miles in length, cut for Rs. 220. Part of the boundary line round the "Rumna" block has still to be cut, as we only got possession in June 1881. The demarcation of State Reserves in the Amraoti District is now complete.

South Berar Division.

17. In the South Berar Division 1,678 acres have been excluded from Kinwat to provide grazing for Gari, Bori, and Therdi villages, and 80 acres have been excluded from Ghatbori for the villagers of Wagdeo. The alterations in the boundary lines necessitated by the changes previously described have been made at a cost of Rs. 36-4-0, and the Garumatergaon Reserve pillars, 90 in number, renewed at a cost of Rs. 310.

Demarcation work outstanding in South Berar.

18. The demarcation of the following State (at present district) Reserves in South Berar has yet to be completed:—

		Square miles.
Basim District—	Medsi	2
	Chandus	5
	Rui-Kinbi	13
	Gahuli	5
	Total ...	25
Akola District—		
(*a.*)	Loni and Matergaon Babul Reserves ...	4
(*b.*)	South Akola-Pimpri Dangar or Mandwa Reserve	8
(*c.*)	South Akola-Barsi Takhli ...	about 31
	Paturghat	
	Jarait Patur	
	Karla	
	Gawandgaon or Sawargaon ...	
	Five Reserves	
	Total ...	43
Buldana District—Ambari Deulghat		about 16

The field work in Basim has been completed, and the report and map will shortly be submitted for final orders.

In Akola the two Babul Reserves and the South Akola Pimpri-Dangar Reserve have been sanctioned since the close of the year, while the remaining South Akola Reserves have yet to be settled by the District and Forest officers.

The Buldana Reserve has yet to be jointly settled on the ground by the District and Forest officers.

Wun Division.

19. The formation of this division was sanctioned in Secretary for Berar to Resident's No. 361, dated 24th February 1881, and the Kelapur Reserve has been demarcated and included therein. The area of Kelapur has been reduced from 48,724 to 40,747 acres. This area will be slightly increased when the grazing requirements of Kapri village have been determined. Kapri is a village in the middle of the southern or Tapeshwar block, at present entirely excluded from the Reserve. It consists of 454 acres of occupied and assigned land, 99 head of cattle, and 902 acres of unoccupied land, so that it is probable when the grazing land is marked off next autumn that several hundred acres will be added to the Reserve.

At the close of the year the reservation of the following additional Reserves in Wun

	Square miles.
Gondwakri	26
Korad	25
Patroat	5
Anjankher	12
Lonbehel	14
Mangla, Renkapur, Jalgaon	1
Phiski	4
Tiwsala	6
Bhiakund	5
Krishnapur	6
Dapura	...
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was under consideration, and has recently been sanctioned, thus completing the selection of reserves in that district.

Since the close of the year the Kinwat Reserve, now included in the Wun Division, has been transferred from South Berar; this transfer was delayed until the close of the fire season.

The Kelapur Reserve has been demarcated by a 40 feet wide cut line. In Keroni block, area 10,031 acres, lines 26 miles in length, cost Rs. 192. In Tapeshwar block, area 30,716 acres, lines 35 miles in length, were cut for Rs. 276; the rest of the boundary was cut, and charged for in 1881-82. Dry stone pillars have been erected where required, but the cost charged in 1881-82.

The boundary line cutting and pillaring of the other new Reserves will be carried out next camping season.

2.—*Protection and Improvement.*

Melghat Division.

Fire protection.

20. The area attempted has been increased in the returns by the addition of the Chikalda Reserve, which was protected last year through the Gugamal Establishment, and the protected area now stands at 389,045 acres, to protect which 437 miles of fire paths were burnt at a cost, including pay of special watchers, of Rs. 1,391, thus giving, in comparison with 1880, an increase in the area protected of 3,076 acres and a decrease in expenditure of Rs. 518.

Three small fires occurred during the season: the first, extending over 230 acres, was due to the carelessness of the conservancy establishment. The outer line was insufficiently burnt, and fire crossed it from the unreserved forest. The second, extending over 243 acres, was lit by trespassers in pursuit of game. The

third, extending over 131 acres, was caused by a grass-cutter smoking outside assigned bounds. In the two latter cases the offenders were detected, and convictions obtained.

To explain the admirable system of fire lines devised by Mr. Ballantyne for his Reserve, I submit a copy of the Melghat taluk map with the Reserves and other detail entered in colours. The positions of the three fires of 1881 are also indicated to show how advantage was taken of the configuration of the ground to surround and beat out the fire, and how zealously the Kurkus have helped to put down forest fires. In Appendix I. are some extracts from a letter from the Deputy Commissioner, Ellichpur, which gives a graphic account of the rush made by the Kurkus to extinguish the fire at Kupa, and will explain far better than I can the means by which the Deputy Commissioner and Divisional Forest officer have for so many years attained unequalled success in the protection from fire of the Melghat Reserves.

Results of fire protection in the Melghat Reserves.

21. A portion of the Bairagarh Reserve has now been protected for twelve years, most of the remainder for ten, and Gugamal has now attained its fifth year of protection. The results are most marked in the improvement of the soil, the increase of young growth, of which a considerable proportion consists of valuable species of trees, and, lastly, in the decrease in the growth of grass. Many portions of the Raipur block are now almost safe from fire, *i. e.*, fire might creep, but cannot run over it; and such is the case in many other parts. I have little doubt that in another ten years extensive fires will be impossible, and protection be almost a matter of routine instead of anxious watchfulness as at present.

Amraoti Range.

Fire protection.

22. The area attempted is comprised in the two closed blocks of Bhiwapur and Chiroree, area 9,408 acres. 50 miles of fire lines were traced at a cost of Rs. 86. The blocks were, owing to the scarcity of grass, open to grazing, and three fires occurred in the Chiroree block, extending respectively over 13,359 and 208 acres. They were probably accidentally kindled by the cattle graziers, but the charge was brought home to no one. There should be no difficulty in keeping fire out of Chiroree and Bhiwapur, now grazing is stopped, and I hope the rumna block, 8,536 acres, will next year be added to the protected area.

South Berar Division.

Fire protection.

23. The following comparative statement of the areas preserved in South Berar will show the advance made:—

Reserve.	Protected. 1880.	Protected. 1881.	Increase.	Decrease.
Garumatergaon	40,192	44,692	4,500	...
Ghatbori	12,380	22,840	10,460	...
Penganga	10,375	10,125	...	250
Kinwat	9,336	51,752	42,416	...
	72,283	129,409	57,376	250
	Less decrease...		250	
	Net increase...		57,126	

One fire occurred in the centre of Garumatergaon. It is supposed to have been lit by some shikarees hunting under a license granted to a neighbouring

jagirdar. Two fires occurred in Ghatbori, the first in Wagdeo block ; 920 acres burnt, due to careless line burning by a forest guard ; the second in Butchwady ; area burnt less than an acre: this fire was wilfully lit by some one unknown, but extinguished by the villagers before the forest subordinates could reach the spot.

Three fires occurred in Penganga, the first extended over 1,000 acres, and is believed to have been caused by some shikarees. The second occurred, while line burning was in progress, and was caused by a panther frightening the burners: it extended over 200 acres. The third is ascribed to an unknown vicious incendiary and spread over 250 acres.

Two fires happened in Kinwat: the first is supposed to have been wilfully lighted: it burnt 500 acres; the second is believed to have extended from a fire left burning by some fishermen from the Moglai, and burnt 300 acres.

In all eight fires occurred, of which two happened during line burning, three were accidental, and three are supposed to have been wilfully kindled. These figures contrast well with those of 1880, when 22 fires occurred, of which six were due to bad line burning, four to accident, and no less than 12 to wilful incendiarism. Mr. Prevost is to be congratulated on the long deferred success which has at last rewarded his perseverance in attempting to protect his reserves, and on the good footing on which he has at last placed the Ghatbori Reserve. The cordial support accorded by the three Deputy Commissioners within whose districts the South Berar Reserves are included has alone rendered success possible.

Wun Division.

Fire protection in Kelapur Reserve.

24. Arrangements for protecting the Kelapur Reserve were begun in January. In the Keroni block 230 acres were burnt before protection was started: one fire occurred afterwards, area burnt 4 acres. In the Tapeshwar block before protection was begun 8,868 acres were burnt, two fires occurred afterwards, burning 3,430 acres: these fires happened in March before the fire lines were finished. In Kelapur the demarcation had to be carried out before the fire lines could be burnt, and work was begun late in the season, so that the results are most creditable to Mr. Stewart, and speak well for the villagers adjacent to the unburnt portions of the reserve.

Melghat Division.

Plantation in the Melghat.

25. No additions have been made to the plantations in the Melghat; but the old plantations have been cleaned, and the nursery and forest garden at Kolkaz maintained, by the expenditure of Rs 407. The trees in the plantations have made less growth than usual owing to the dryness of the season; on the other hand they have not suffered from frost The Assistant Conservator reports that the areas cut down by frost last year show no signs of recovery; they are therefore finally written off the returns.

South Berar Division.

Plantations in Kinwat

26. Before the rains of 1880, 256 acres were sown up with teak and bamboo in Kinwat at a cost of Rs. 751-1-9, but owing to the light rain-fall the operation was an entire failure: the seed as a rule did not germinate, or when it did, the plants dried up; and as three year old teak seed was sown with a view to early germination, there is now no hope of a fresh crop of seedlings this rains. In accordance with para 12 of No. 652-F., dated 9th October 1880, Mr. Prevost and I made an exhaustive examination of the Kinwat plantations in February last, and found that the number of seedlings cut down by the frost of 1879 that threw up shoots in the rains of 1880 was very small, and that most of the shoots so thrown up were dead or dying. We therefore wrote off the entire area as destroyed, and the area return of plantations in South Berar is now blank, and the work stopped.

Before new work is started we shall have greater powers of control owing to the increased staff, and the more rapid means of communication afforded by the new roads; the effect of fire protection too will be better known, and if these at all rival the improvement in growth and rapid filling up with teak, sadra, and other seedlings noticeable in the Danora block of Kinwat, whence fire has been excluded for five years, it may be possible to considerably reduce the area to be planted up. Mr. Prevost and I both think teak and bamboo should be adhered to in future plantations, and are sanguine of success when there is thicker undergrowth, and more time can be devoted to the work.

Amraoti District Plantations.

27. The plantations in the Amraoti district which failed some years back, have this year been struck off the return of plantations.

Creeper cutting in the Melghat.

28. Creeper cutting in the Bairagarh Reserve has again been started as follows:—

Block	3	...	4	square miles.
"	29	...	7	"
"	32	...	16	"
	Total	...	27	"

The cost was Rs. 210, or Rs. 7-12 per square mile.

Roads in the Melghat Division constructed by Public Works Department.

29. The Ellichpur-Pili road, a 1st class road under construction by the Public Works Department, which will form the main line for the Melghat Taluk, will, the Executive Engineer informs me, probably be completed by December next. The total length is 33½ miles, estimated cost Rs. 3,22,998, now open for traffic 28 miles, expenditure to end of June 1881 Rs. 2,94,525. Considerable progress has been made with a 3rd class road branching from the above road and running up to Chikalda length 13½ miles, estimated cost Rs. 17,495, expenditure to 30th June 1881 Rs. 11,708. This branch will form the connecting link for the forest roads through the Gugamal Reserve, and will also be open by December next. The partial opening of the Ellichpur-Pili road has already increased the export of bamboos, and when the Melghat roads are all in working order, there will probably be no difficulty in exporting the full annual yield of bamboos; a considerable portion of which now rots, while Amraoti is partly supplied from the Central Provinces.

Forest roads in the Melghat Division.

30. The construction of forest cart roads to act as feeders to the main lines has made the following progress:—

In Bairagarh the Khapati and Kokra road, an extension of the Raipur road, eight miles in length, has been made at a cost of Rs. 4,921. In Gugamal the Pastalai and Katida road, 7 miles in length, has been made at a cost of Rs. 3,510. In both these roads there was considerably more than the average amount of rock cutting, which has raised the cost above the average rate of Rs. 400 a mile. A fair weather cart road has been opened out from Pili to Deulghat on the Tapti, length 30 miles, cost Rs. 3,500—a sum supplied by the Public Works Department. With moderate annual repairs this road will, with the Ellichpur-Pili road, open up cart traffic between Ellichpur and the Nimar District of the Central Provinces.

Roads in South Berar Division.

31. In South Berar Rs. 100-5-0 have been spent in improving existing lines of roads in the reserves, including making two in Penganga which serve as feeders to the Basim-Pusad road, passable for carts. The work was cheaply and well-done, and the further improvement of roads will be pushed on next cold season.

Buildings in Melghat Division.

32. The thanas and other Government buildings in the Melghat have been repaired at a cost of Rs. 512-7-0, and are in good order.

Buildings in South Berar Division.

33. In South Berar five new thanas in Garumatergaon have been erected for Rs. 185-14-6, five in Ghatbori for Rs. 197, three in Penganga for Rs. 112-8-0, while Rs. 11 were spent in repairs.

Valuation Surveys in the Melghat Division.

34. With a view to making proposals for working the Bairagarh Reserve, some valuation surveys were made during the past spring, of which the results are given in Appendix H. The areas valued are indicated in the Melghat map, and the area of which they are regarded as samples lies within a five-mile carting radius of Sembadoh. The proposals for the erection of a saw-mill, which led to these surveys being made, are being dealt with separately, and do not form part of the work of the year under notice.

Forest rights in the Bairagarh Reserve.

35. In para. 10 of the 1879-80 Report the number of villages in the Bairagarh Reserve was given as 29, that in Gugamal as 6. In Gugamal there are now seven villages, including one on the boundary line, and the resident population is 399. No change in these villages is advisable.

In Bairagarh, there are still 29 villages, of these 14 are located in the "eight black soil village blocks" shown in the map attached. Makhla, a small village, can get on very well as it is, while eleven villages, as follows:—

1. Mangia,	5. Khui,	9. Chunkera,
2. Aki,	6. Karanj,	10. Bichukera,
3. Kamda,	7. Mariam,	11. Pandia,
4. Khund,	8. Awagarh,	

will, in time, it is hoped, move into the village blocks. These eleven villages contain 186 houses and 992 inhabitants.

The resident village population in Bairagarh is 3,745. The black soil village blocks have been demarcated by stone pillars, and a survey commenced by the Forest Survey; on its completion the culturable and pasturage land will be laid down, and the measures alluded to in para 10 be completed.

There are no outstanding questions of forest rights in south Berar.

3.—*Yield and Working.*

Melghat Division.

Yield of the Melghat Reserves.

36. The Melghat Reserves have, as a whole, been chiefly worked for bamboos, the teak exported amounting to only 6,957 cubic feet, other kinds of wood 579 cubic feet, opposed to 19,998 cubic feet and 3,947 cubic feet in the previous year. After the final transfer of 120 square miles from Gugamal to the unreserves in 1879, the system of having one block in Gugamal open annually to unrestricted felling was stopped, and the forest closed. The felling operations of the past year have been confined to the Somita-Borda block of Bairagarh, where a clearing has been made for the villagers, to trees cut in road-making and to meeting a few Government indents near Pili. No fellings in Gugamal will be possible for many years, and extensive cuttings in Bairagarh are deferred pending arrangements for systematically working that reserve. The exhaustion of the unreserved forest will probably lead to the commencement of regular fellings in Bairagarh in 1882.

Bamboos were exported as follows:—

	1879-80	1880-81.
Gugamal	360,896	... 76,380
Bairagarh	263,416	... 480,220
	624,312	... 556,600

The decrease in Gugamal is due to the change in system already alluded to, while the increase in Bairagarh is to a great extent due to the new roads and additional facilities for export. The minor forest produce and miscellaneous collections stand:—

			Rs.
1879-80	...	...	... 2,335
1880-81	...	...	.. 1,095

the decrease being chiefly due to the closure of Gugamal. As long as one block of Gugamal was open it was customary to credit the Reserve with half the grazing and grass revenue of the Melghat. As no grazing is now allowed, save on the Pili road works, no such credit appears in this year's returns.

South Berar Division.

Yield and working.

37. There have been no fellings in South Berar, and bamboos and grass are the only articles exported. The past two years contrast as follows:—

		1879-80.		1880-81.
Bamboos exported	...	4,750	...	7,875

an increase which is satisfactory, although less interesting than the Melghat figures, as the supply is limited.

		1879-80. Pounds.		1880-81. Pounds.
The grass exports were	...	2,076,060	...	17,272,395

or an increase of fifteen million pounds, which shows what a grand resource the reserves form in years of grass famine.

The recorded increase would have been much higher, but no return could conveniently be kept of the grass exported from Ghatbori from September to December, when, in view of the dire want of fodder, free cutting of grass was allowed.

Wun Division.

Yield and working.

38. The only fellings in this division were made in cutting the boundary lines in Kelapur, which gave 3,000 teak bullies, of which 500 were sold, and 2,500 in hand at the close of the year. Proposals for the treatment of the Wun Reserves will be drawn up next camping season.

Amraoti Range.

Yield and working.

39. The Amraoti Hills Reserve was taken over so late in the year that a register of yield was only started in April 1881. The grass was sold by auction, the grazing by the issue of passes by the district ranger, and the small sales of fuel were effected through the patels under the old system, the new revenue stations not being started until June 1881, when the grass reserve leases fell in. The new system may be briefly described as follows:—

The Bhiwapur and Churoree blocks will be protected from fire and be closed to felling and grazing until the forest growth has improved and thinning is required.

The grass or rumna block will be protected from fire, but be open to grass cutting on passes, and after the grass crop, to grazing by certain villages, on the condition that they keep fire out. The Patels of these villages are to receive two per cent. on the grass sales, provided they stop illicit cutting and keep fire out. By this plan it is hoped the scrub trees now on the ground will improve, while the fodder grass requirements of Amraoti will be met. The open Reserve and

that portion of the District Forests included in the Amraoti Range are open to grazing and fuel cutting, the Amraoti hill villagers felling fuel free of charge for their own use, but paying for grazing except on plough cattle.

The forest dues on all exports are collected by revenue stations similar to those in the Melghat Division.

4.—*Financial Results.*

Direction Division.

Financial results.

40. The accounts kept in the Direction office were up to October included in those of the old Northern Division, and were kept separately later on. The accounts of the Reserved Forests in the Wun Division and Amraoti Range were amalgamated with the Direction accounts from January to March, and will be separately considered; the Direction, Receipts, and Charges taken alone stand as follows :—

	1879-80.	1880-81.
Receipts	...	484
Working charges, A	...	3,017
Establishment, B	17,586 ...	16,533
Total charges ...	17,586 ...	19,550

The increase in charges is due to a change in the system of accounts. Last year various charges, such as feed of elephant, repairs to office, &c., were charged rateably to the Direction office and the Northern Division office; this year all such expenditure is debited to the one office, as well as most of the printing charges and the debit for English stationery for the province. The Receipts consist of house-rent, and the proceeds of sales of old stores. The same system has been adopted in the Divisional accounts, where the Divisional office receipts and charges are kept separately from those of the Reserved or District Forests, a course which simplifies the accounts; and by doing away with the rateable distribution of such charges among the different classes of forest, will in future facilitate a more accurate survey of the financial administration of the department.

Melghat Division.

Financial results, Melghat Reserves.

41. The revenue and expenditure of the Reserves in the Melghat stand as follows :—

Budget Heads.	Bairagarh.		Gugamal and Chikalda.		Total.	
	1879-80.	1880-81.	1879-80.	1880-81.	1879-80.	1880-81.
Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber, &c, removed by Government	798	512	...	...	798	512
II. Do. by purchasers .	6,239	7,355	11,992	763	18,231	8,118
III. Confiscated and waif wood,	11	16	17	4	28	20
V. Miscellaneous ...	263	83	14	...	277	83
Total ..	7,311	7,966	12,023	767	19,334	8,733
Expenditure.						
Working charges A.	8,794	7,534	2,119	4,027	10,913	9,561
Establishment, B.	11,239	4,485	3,642	3,370	14,881	9,855
Total expenditure ...	20,033	12,019	5,761	7,397	25,794	19,416

The Bairagarh establishment charges for 1879-80, include pay and contingencies of the Melghat Sub-Division, Mr. Ballantyne's old charge. The receipts and charges of the Divisional office stood as follows:—

	1880-81.
	Rs.
Receipts	172
Expenditure on Works, A.	1,912
Do. on Establishment and Contingencies, B.	10,012
Total expenditure ...	11,924

As explained with reference to the Direction office, the working charges refer to food of elephant, purchase of office stock, repair to office building, &c. The cause of the decrease in the reserve revenue has been explained under the head "Yield."

The decrease in expenditure in Bairagarh is due to the stoppage of plantation work, while the increase in Gugamal is due to the construction of the Pastalai and Katida road. The decrease in Gugamal establishment charges is due to the reductions consequent on the exclusion of 120 square miles of reserve in 1879.

The division having been newly formed, no comparison with last year's office charges can be instituted.

Amraoti Range.

Financial results.

42. The receipts and charges of this range, which was formed in January 1881, are as follows:—

	Rs.
Receipts	59
Working charges, A. ...	1,495
Establishment charges, B. ...	422
Total expenditure ...	1,917

The revenue shown is from petty receipts for fuel, &c., *vide* para. 39. The working charges are for demarcation and fire conservancy, and the establishment charges for the newly sanctioned establishment of Rs. 144 a month and the payment of the old establishment.

South Berar Division

Financial results.

43. The receipts and expenditure stand thus:—

Budget Heads.	Garumatergaon.		Ghatbori.		Penganga.		Kinwat.		Total.	
	1879-80.	1880-81.	1879-80.	1880-81.	1879-80.	1880-81.	1879-80.	1880-81.	1879-80.	1880-81.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Timber, &c., removed by Government	..	...	...	...	...	..	...	...	...	...
II.— Do. by purchasers.	103	2,552	197	1,238	51	121	154	121	505	4,032
III.—Confiscated and waif wood ..	...	...	5	...	...	..	...	...	5	...
V.—Miscellaneous	108	..	107	4	107	...	102	:	424	4
Total receipts ...	211	2,552	309	1,242	158	121	256	121	934	4,036
Expenditure on Works, A. ..	509	753	470	595	259	301	1,655	1,333	2,890	2,982
Do. on Establishment, B. ..	1,316	1,327	1,297	1,287	585	694	1,288	1,418	4,487	4,726
Total expenditure .	1,825	2,080	1,767	1,882	844	995	2,941	2,751	7,377	7,708

The expenditure shown here differs from that given in para. 46 of last year's Report, which included the expenditure in the Divisional office.

The receipts and charges in the Divisional office compare as follows :—

	1879-80.	1880-81.
Receipts		263
Working charges, A.	1,548 ...	1,092
Establishment charges, B.... ...	7,483 ...	9,063
Total expenditure ...	9,031 ...	10,155

The increase in expenditure in Garumatergaon is due to the renew . of the boundary pillars and erection of thanas ; that in Ghatbori and Pengang to the erection of thanas and increased fire protection charges, while in Ki at the decrease is due to the abandonment of the plantations.

The increase in establishment charges is due to fewer fines havi g been imposed and the disbursement of some 1879-80 pay to men returning fr i leave.

The increase in office establishment and contingent charges i due to Mr. Prevost's promotion, to a slight increase under travelling and camp penses, and to all Divisional office charges being debited to one head during the p st year.

Wun Division.

Financial results.

44. The receipts and charges inc red on account of this division in February an March 1881 stand—

Budget Heads.	Kelap
I. Timber, &c., removed by Government	..
II. Do., do. by purchasers	1
III. Confiscated and waif wood	..
V. Miscellaneous	..
Total Receipts ...	1
Working charges, A.	226
Establishment charges, B.	1,366
Total charges...	1,592

The charges are for boundary line cutting and fire line burning.

The establishment charges include some arrear pa due when the Reserve was taken over.

The Divisional office charges, including Mr. Stewart's pay and camp charges for the twelve months, are as below :—

	Rs.
Receipts	...
Working charges, A.	...
Establishment charges, B	5,003

General remarks on financial results.

45. The previous paragraphs will have shown that it is difficult to compare the figures of the present year with those of past years, owing to the practice formerly pursued of rateably debiting the different classes of forests forming one division with the Divisional office establishment and miscellaneous charges, the result being that when any division was divided, it became very difficult to trace the actual expenditure on each different forest; this difficulty has now been removed by giving Direction, Divisional office, State Reserve, District Reserve, and District Unreserve expenditure separately, a course which will allow of any transfer or comparisons that may be necessary.

(*b*.)—District Reserve Forests.

1.—*Area and Boundary.*

General remarks on the District Reserved Forests.

46. As all District Reserves of any considerable area and importance are in course of transfer to the class of State Reserves, interest in this class of forests is chiefly confined to the small areas which will form the nucleus of the District Reserves of the future, *viz.*, the "woods" (or buns) which, evenly distributed over Berar, should meet the ordinary village demands for small timber and firewood, and so carry out what I imagine to have been the original intention of the Survey Department in setting aside babul " woods " (buns). Form 45, with the marginal notes therein, will, it is believed, make all changes in the District Reserves clear, and Appendix A. give the necessary detail regarding these areas. It is impossible at present to say what portion of the present area will be set aside for woods or give the probable transfer from Unreserved Forests.

District Reserves in Ellichpur.

47. The District Reserves in Ellichpur remain the same as last year, save for a small clerical correction in the area statements. Some informalities in the reservation of these Reserves was noticed some time ago. During the past year the Deputy Commissioner has drawn up a scheme for revising the areas of the babul woods (buns) and by excluding useless tracts and assigned lands hitherto erroneously included therein, proposes the exclusion of 2,883 acres and future reservation of only 1,608 acres. The Deputy Commissioner has also taken up the question of sendi woods (buns), and has lately had the services of the probationer placed at his disposal, to help in formulating his proposals. Considerable progress has therefore been made in drawing up plans for the future organization of the district forests in Ellichpur.

District Reserves in Amraoti.

48. The transfer of the Amraoti Hills Reserve completes the reservation of State Reserves in this district, and the 41 square miles now shown in Form 45 consist of babul woods (buns) and grass lands (rumnas), including an addition of 10 square miles made to the latter from the unreserved area. The re-classification of the area of District Forests in Amraoti was not started until after the close of the year.

District Reserves in Akola.

49. In Akola the area has been increased by the addition of seven square miles of grass lands (rumnas), while six square miles of occupied land, hitherto erroneously returned as District Reserve, have been excluded. With reference to the 81 square miles now shown, schemes for various transfers to the class of State Reserves are under consideration, *vide* para. 18. Whatever area is not transferred will, later on, be re-classified in the District Forests.

District Reserves in Buldana.

50. No changes have taken place in the Reserves of this district, nor has the work of re-classification commenced.

District Reserves in Basim.

51. The area of the Basim Reserves has not changed: some transfers to the class of State Reserves are proposed, *vide* para. 18. When these are sanctioned the re-classification of the remainder will be started.

District Reserves in Wun.

52. In the Wun District Reserves, 76 square miles were transferred to State Reserves during the year; 103 square miles have since been transferred, leaving 113 square miles, which are now being re-classified as District Forests.

2.—*Protection and Improvement.*

Prosecutions in District Forests.

53. The prosecutions in the District Forests have not hitherto been given separately in Form

47, so the figures cannot be compared in detail:—

	1879-80.		1880-81.	
	Cases.	Convictions.	Cases.	Convictions.
Ellichpur ...			12	5
Amraoti ...			24	20
Akola ...	133	116 ...	23	23
Buldana ...			19	16
Basim ...			27	22
Wun ...			47	35
Total ...	133	116 ...	152	121

The returns of prosecutions are faulty, offences in the different classes of forest having in some cases been mixed together. Steps are now being taken to have distinct registers kept up in districts, similar to the State Reserves case register, and so to render the information precise.

The cases nearly all refer to unauthorized removal of reserved timber. The increase in numbers occurred in Wun, where there were 17 cases and 14 convictions in 1879-80, giving an increase of 30 cases and 21 convictions during the year.

Grazing in the District Reserves.

54. The right to graze has been sold in all the District Reserves, on the ground that grazing reduced the chance of damage by fire, and, pending the introduction of systematic management, was the most expedient plan to adopt.

Fire protection.

55. Systematic fire protection was attempted in none of the District Reserves, and no expenditure incurred. In Basim the District Forest establishment did its best to keep fire out; and the Deputy Commissioner notes that only three fires were reported, one of which burnt the Medsi Reserve, area two square miles, the others extended over small areas in the Mengrul Reserves.

In Buldana the Deulghat-Ambari Reserve was partly protected.

Protection was not attempted in Wun or Amraoti.

The babul woods (buns) are, as a rule, free of grass and are not burnt.

3.—*Yield and Working.*

Yield and working of District Reserved Forests generally.

56. In your orders on para. 49 of last year's Forest Report, you desired the yield of District Reserved and Unreserved Forests to be shown separately, and classified as far as was practicable. Compliance with this apparently simple request was, I regret to say, far from easy, and was complicated by the facts that the establishment was under revision, the areas administered under re-classification, the rules for the regulation of the forests were falling into disuse, and new ones in course of formation. During the last six months of the year progress was made in all the points alluded to, and the District Forest accounts placed on a new and simpler footing; but the classification of the District Forests had not advanced far enough to admit of a new system of working being introduced and registers of yield kept up.

Under the circumstance I thought nothing would be gained by asking for information which I knew could not be accurately given, and when obtained, would be misleading; the returns of yield therefore remain unchanged, and I would suggest their being left as they are, until we can ask for full information with reference to each sub-division of the District Forests of the future.

The present Forest rules for working the District Forests, Reserved and Unreserved, may briefly be described as follows:—

The District Forests are notified as consisting of all the unoccupied wastes in Berar. Thirteen kinds of wood are reserved by Rule I., and the issue of passes for cutting same authorized. Rates for the sale of the trees reserved under Rule I. are given in Rule II. Rates for the sale of unreserved trees are given in Rule III. In Rule IV. the free use of fuel from unreserved trees is permitted to residents of villages within which such trees grow, and rates laid down for the issue of passes when it was exported beyond the village bounds. This rule has a saving clause, viz., that it need not be applied to small patches of scrub waste land. Rule V. gives rates for minor forest produce. Rule VI. provides for the remuneration of patels and patwaris when employed in carrying out the rules.

The rules were framed to meet an urgent demand for some rules, but it was apparently at once felt that the District Forests were so intangible, that their subdivision into manageable tracts was absolutely necessary, and the Settlement and Forest rules were used to set aside and define certain portions, hence the babul buns, coppices, rumnas, fuel, and other reserves of later reports, which it is now hoped may be put on a sound footing. The re-classification now proposed may be briefly described as follows :—

The District Forests will consist of all unoccupied and unassigned Government (khalsa) lands, *i. e.*, field numbers. They will be divided into the following classes :—

Woods (buns)—areas set aside for the growth of babul and other trees.

Grass lands (rumnas)—areas set aside for fodder and thatching grass.

Grazing lands (khulla jungle)—or the area permanently required for grazing.

Open forest (parit)—the area which it is proposed should sooner or later be cultivated, but which is for the time administered on the same footing as the grazing lands.

The "woods" will consist of tracts too small to form into reserved forest, set aside for the production of babul, teak, sendi, mango, and other trees. They will be thrown into circles generally bounded by a taluk, and will be worked like miniature reserved forests.

It is probable the chief timber tree will be babul, and that after the capabilities of each small wood have been roughly determined, that it will be possible to work them on a regular system. The reproduction of babul is such a simple matter, that the working plans will not be complex.

The grass lands will be few in number, and be chiefly near large towns or villages; the revenue will usually be collected by auction sales.

The largest area will be the grazing lands and open forest; here the preservation of trees will be limited, as a rule, to fruit trees, and every effort should be made to increase their number for the sake of shade and beauty. The revenue in these tracts will be realised by auction sales, or the levy of a grazing due, and the country side be free to use wood other than fruit trees and minor forest products without charge. It will at once be seen how simple the administration of the district forests will become, once this classification is completed, and the new taluk forest establishment drilled into keeping the few necessary books and registers and carrying out the provisions of the new forest rules.

I trust the notes in this paragraph will afford all information asked for in para. 14 of No. 652-F., dated 9th October 1880.

Working and yield of District Reserves in Ellichpur.

57. The babul buns in Ellichpur yielded Rs. 942·8, or about 470 cart loads of fuel, leaving a small stock in hand valued at Rs. 100; cuttings are confined to numbers, which will probably have to be given up, *vide* para. 47.

58. In Amraoti the District Reserves are returned as yielding Rs. 1,151-1-9 by sale of fuel, equal to about 2,800 cart loads, in addition to a lot of babul thinnings in Badneir and Malkheir sold on the ground for about Rs. 101. The sales recorded chiefly took place in Amraoti and Karanja Reserves and in the babul buns.

Working and yield of District Reserves in Amraoti.

59. In Basim a lot of teak goles were sold in Chandus and Rui-kinhi, about 2,000 in number, for Rs. 1,194-5-0; but Major Farrer, the Deputy Commissioner, notes that the Forest Establishment carried out the cutting in a most wasteful manner—an opinion in which his predecessor and the local Forest officer agreed.

Working and yield of District Reserves in Basim.

60. In Akola, the South Akola District Reserves or coppices are reported to have been worked, and Rs. 652-8-0 realised by the sale of about 1,740 cart loads of fuel, while Rs. 32 have been realised for about 64 goles.

Working and yield of District Reserves in Akola.

61. The District Reserves in Buldana and Wun have not been worked.

Working and yield of District Reserves in Buldana and Wun.

4.—*Financial Results.*

62. Appendices B., C., D. to this Report, give certain information with regard to the financial results of all the District Forests, while the following is a comparative abstract of receipts and expenditure in the District Reserves :—

Financial results.

Budget Head.	Ellichpur District		Amraoti District		Akola District.		Buldana District		Basim District		Total.	
	1879-80	1880 81	1879-80.	1880-81.	1879-80.	1880 81	1879 80.	1880-81	1879-80	1880 81	1879-80	1880 81
I. Timber, &c., removed by Government agency ..	...	...	...	...	...	...	..	...	...	...	...	..
II Do., by purchasers	1,397	2,724	23,091	28,674	2,130	794	1,051	723	2,111	2,428	29,780	35,343
III Confiscated and waif wood ...	...	...	...	7	...	...	...	...	...	...	...	7
V Miscellaneous...	...	.	17	8	.	...	...	.	47	...	64	8
Total receipts ...	1,397	2,724	23,108	28,689	2,130	794	1,051	723	2,158	2,428	29,844	35,358
Working charges, A..	131	306	4,451	1,132	738	166	124	...	521	11	5,965	1,615
Establishment charges B. ..		791		1,595		943				1,950		5 279
Total expenditure...	131	1,097	4,451	2,727	738	1,109	124	..	521	1,961	5,965	6,894
Surplus	1,266	1,627	18,657	25,962	1,392	...	927	723	1,637	467	23,879	28,464
Deficit	...	...	...	...	...	315		...	...	...	...	...

The figures are not in all cases reliable for the reasons explained in para. 56, with reference to registers of yield, &c. The actual expenditure is given this year instead of a rateable portion of the District Forests gross expenditure. In Wun the Reserved Forests were not managed separately from the Unreserved, and no figures can be given. In Buldana no special expenses are returned as incurred on account of the Reserves, while all the establishment is charged to the Unreserved Forests.

CHAPTER III.—District Unreserved Forests.

1.—*Area and Boundary.*

63. I should have preferred dwelling on the District Forest Reserved and Unreserved in one Chapter, and think if this course is followed in future, the review will be clearer, and a certain amount of repetition avoided.

Areas of Unreserved Forests.

The area of Unreserved Forest is given district by district in Form 45. It is very difficult at present to say what these Government "unoccupied wastes" really consist of, and to reconcile the figures in the Forest Report with those given in the Revenue Report of the Province. The Deputy Commissioner of Amraoti dwells on this point, while the Deputy Commissioner of Ellichpur reconciles the figures and shows how curiously the District Forests are at present constituted. It may be useful to quote the Ellichpur figures. The District Reserved Forests, in this case Babul Buns, are returned as follows in the Revenue papers :—

		Acres.	Guntas.
1.	Tanks and salt fields	55	8
2.	Babul buns set apart at time of settlement	1,094	14
3.	Free grazing	2,794	13
4	Camping grounds, cattle stands, threshing floors, &c.	443	31
5.	Given out for cultivation and grazing.	104	3
	Area of District Reserves in Form 45 ...	4,491	29

From which it appears that 3,397 acres, 15 guntas, consisting of all sorts of assigned land, have in time become covered with babul and been informally classed as District Reserve. Similarly, the Unreserves of Ellichpur (exclusive of the Melghat) consist of :—

	Acres.	Guntas.
Scrub (katwan)...	814	9
Unculturable land (parampok)	513	0
Free grazing	16,688	28
Unoccupied assessed land	6,837	8
	24,853	5
Add unoccupied land included in the Melghat Forest Division ...	7,406	1
Total ...	32,259	6

It follows, therefore, that in the case of the District Reserves, unless the assigned lands can be resumed, the area will be reduced to 1,094 acres; while in the case of the Unreserves, if the new classification of the District Forests is accepted, and assigned lands are excluded, we shall only have 15,570 acres, 18 guntas, to deal with in the Ellichpur plain Taluks.

It is probable when similar statements are completed for other districts that the District Forest area will be considerably reduced.

2.—*Protection and Improvement.*

Protection and improvement of Unreserved Forests in all Districts.

64. In the District Unreserved Forests denudation is progressing rapidly near villages, slowly in less frequented localities. The indefinite reservation of certain trees but slightly delays their destruction, nor can any improvement be looked for until we have divided wood lands from grass lands, and introduced a definite system of management

Protection of the Unreserved Forests in the Melghat Division.

65. In the newly formed Melghat Division the entire Unreserved Forests of the Melghat Taluk, and parts of those in Daryapur and Ellichpur, Jalgaon, and Akot Taluks, have been included, as shown in Form 45. The subject of the protection of these forests was dwelt on in para. 59 of the 1879-80 Forest Report.

The following measures were adopted during the year :—Temporary cultivation on the banks of streams, or on the slopes of hills, where a plough cannot be used, has been forbidden; the taluk has been divided into four beats, and four foresters

appointed to see these orders are carried out. Mr. Ballantyne reports that this measure has worked well, and only regrets it was not introduced ten years ago.

With a view to foster the growth of teak, sanction was accorded to a prohibitive rate of royalty of Rs. 5 a score being levied on all teak saplings below 9" in girth: this is no hardship on the people, as splendid bamboos can be exported at Rupee 1 per 100, while it should lead to the preservation of small teak and so increase the number of large poles available—a description of timber daily more difficult to procure. This order was only in force in February, and was suspended in March for further inquiry as to its effect. I trust it will be confirmed for the next working season.

3.—*Yield and Working*

Yield of the unreserved forest.

66. The approximate yield of the Melghat Unreserves is given in Appendix E., to which is attached a return, Appendix F., of the cattle that entered the Melghat last season. I regret that we cannot say how many heads of cattle came from Amraoti, from Morsi, and so on, through the Ellichpur and other nakas

There has been an enormous falling-off in the export of timber, as will be seen below —

	1879-80.	1880-81.	Increase.	Decrease
	C feet	C. feet.	No.	C. feet.
Teak, Tewus, Sesham	... 254,148	... 164,331	... ...	89,817
Other kinds of woods.	... 112,922	... 97,488	... ...	15,434
	No.	No.		
Bamboos ...	... 1,170,372	... 1,516,800	... 346,428	...

or 35 per cent. less teak and 14 per cent. less of other woods, while bamboos have increased 23 per cent. Mr. Ballantyne accounts for this fact as follows:—

(*a*) The price of food in the Melghat is low, and the kurkus are able to obtain the necessaries of life by taking but a little wood to the bazaars.

(*b*.) Wood, like other country produce, fetches very low prices, so that the Kurkus are not tempted to work hard.

(*c*.) The demand for wood is small, and it often remains unsold on bazaar days, this is probably due to the plains ryots having less money to spend.

(*d*.) The supply of large teak trees in the Unreserved Forests is nearly exhausted, and it is difficult to find large timber of any description.

Most of the teak exported was drawn from the 120 square miles of the Gugamal Reserve abandoned in 1879, which was the chief source of the large exports in 1879-80. Mr. Ballantyne reports this as now nearly cleared. The fact of the chief decrease being under the head Teak tallies with the observations made in the forests and shows that the supply is nearly exhausted; as the Kurkus would have exported teak in preference to other kinds, because it brings nearly double the price for the same labour. At the same time the demand for large teak at the Central Province Naka at Komai has increased, and our sale of bamboos exported in default of timber being available has also risen.

I append an estimate (Appendix G.) of the exports from the Unreserved and State Forests of the Melghat for the last eight years, drawn up in accordance with para. 7 of Government of India No 652-F., dated 9th October 1880. This return also proves that the great decrease in the wood exports is under the head of Teak, while the amount of other exports has not fallen off so much, as the appearance of the forests led us to expect would be the case.

The policy of exhausting the Unreserves of timber, and so inducing a steady demand for the out-turn of the Reserve, has been steadily pursued for many years;

and, as far as we can say, the time has now come for placing the timber of the Reserves in the market. As appendant to the satisfactory sale of the reserve timber and bamboos we shall in future only realise revenue from the unreserves on small timber, fuel, grass and grazing.

The grass and grazing out-turn of the Melghat increased in 1880, as the growth of grass in the hills was fair, while almost *nil* in the plains.

The figures contrast as follows:—

	1879-80	1880-81.
	Rs	Rs
Grass sales	2,098 ...	1,702
Grazing fees	8,951 ...	14,744
	No.	No.
Head of cattle	118,173 ...	199,522

It has been impossible to collect data as to the yield of the other Unreserved Forests as nine-tenths of the produce is exported free of dues, and for the reasons given in para. 56.

4.—*Financial Results.*

Financial results—Unreserved Forests.

67. Appendices B., C., D., give the joint financial results of the District Forests, Reserved and Unreserved. the comparative statement below gives those of the Unreserved Forests, including the Melghat, separately, save in the case of Wun, where the Reserves were not worked for timber, but were grazed over on Unreserved District Forest passes, and any separate credit would be misleading:—

Budget Head.	Melghat		Ellichpur		Amraoti.		Akola		Buldana		Wun.		Basim		Total	
	1879-80	1880 81.	1879 80	1880-81	1879-80	1880 81.	1879 80	1880-81.	1879-80.	1880-81.	1879 80.	1880-81	1879-80.	1880-81.	1879-80	1880-81
II.—Timber, &c., removed by purchasers—	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs.	Rs	Rs	Rs	Rs	Rs
(a)—Timber	88,746	60,878	33	3	...	..	34	16	1,571	1,729	2,688	3,659	3,580		96,652	66,285
Firewood and charcoal	7,773	8,065	282		1,894	198	1,052	651	778	871	234	178	1,614	1,448	13,537	11,111
(c)—Bamboos	11,704	15,168	..				29	56		..	789	658		17	12,522	15,899
(d)—Grazing and fodder grass	6,574	16,536	3,861	2,055	41,170	27,460	18,916	17,478	15,764	16,401	24,150	21,115	5,248	5,120	1,15,683	1,06,175
(e)—Other minor produce ...	936	1,267	699	284	4,508	2,563	823	678	1,496	1,250	5,639	4,347	1,418	5,192	15,569	15,671
III.—Confiscated and waif wood	121	151	1,077	774	23	3	14	..	299	154	2,[illegible]	336	...	...	1,874	1,466
V.—Miscellaneous—																
(a)—Fines and forfeitures	12			...	10		...		6	...	3		...	..	35	..
(b)—Refunds ..				..		..				..	3	74	..		3	74
(c)—Other sources ..	578	2		...		..	800	725	4	..	68	22	64		1,514	756
Total Receipts	116,444	102,167	5,952	3,116	47,515	30,222	21,668	19,606	19,918	20,105	33,968	30,439	11,924	11,787	2,57,389	2,17,427
Working charges, A	31,471	21,222	918	123	4451	6321	738		1237	165	4953	5384	1564	217	45,332	33,435
Establishment do. B.		7,378								874		3100				11,352
Total Expenditure .	31,471	28,600	918	123	4,451	6,321	738		1,237	1,039	4,953	8,484	1,564	217	45,332	44,787
Surplus .	84,973	73,564	5,034	2,993	43,064	23,8[illegible]8	20,930	19,604	18,681	19,066	29,015	21,955	10,360	11,570	2,12,057	1,72,651
Deficit ...																

CHAPTER IV.—General Remarks.

Re-distribution of the Subordinate Forest Establishment

68. The Subordinate Forest establishment has been re-distributed during the years in the districts, so as to admit of a forester, assisted where necessary by a forest guard, being posted to each plains taluk under the tahsildar, thus more directly interesting the latter in the District Forests; in the forest divisions, so as to provide for the establishment of the new divisions and offices. It is needless here to detail the new allotments, but I may note that as soon as an additional officer is posted to the province, a slight re-distribution of the office employés will provide for the new South Berar or Purna Divisional office, and no addition to the establishment be necessary.

New survey of the Melghat Taluk.

69. The very faulty character of the first map of the Melght Taluk has long been known, but the want of a good map was more keenly felt last year when we tried to mark off village boundaries and forest tracts under valuation, &c., on the map; proposals for a new survey of the taluk were accordingly submitted, and a survey partly on a 2" partly on a 4" scale by the Forest Survey branch has been sanctioned; work, however, was not started until April 1881. The map of the Melghat attached to this Report shows the areas it is proposed to survey on the different scales. The new survey will prove invaluable to both Revenue and Forests officials, and any systematic management of the Melghat without such a map seems impossible.

Maps of other Reserves.

70. With a view to providing District and Forest officers with manageable maps of the plains reserves, reductions of the Revenue Survey 8" maps have been made on a 2" scale, and copies are now being issued to Deputy Commissioners, Divisional, and Range Forest officers. On these the guards beats, the system of fire lines, rights of way, &c., will be shown. During the year Mr. Stewart prepared 31 of these maps, and I believe you like the style adopted.

Rain-fall and Flood Register.

71. The registers of rain-fall, &c., have been kept up as usual, and are attached as Appendix J. The floods have also been gauged, but as these are about to be put on a new footing, in accordance with para. 11 of No. 652-F., dated 9th October 1880, and the forms are awkward to print, they are not forwarded.

Forest Depôts.

72. The question of establishing depôts for the sale of timber and bamboos has been frequently mooted, and an attempt made to start them at tahsili towns in the Wun District has met with fair success. I cannot say I am in favor of forming Government depôts, and believe a far better scheme would be for Divisional officers, after they have determined what amount of timber they can supply, to issue notices that a certain supply is available for removal by purchasers, and that during certain months they are prepared to meet indents for a supply at places on main lines of road. Government is sure to lose if it puts wood on stock on the chance of purchasers coming forward, whereas my scheme would gradually lead to other people buying our wood to sell at retail prices, and the wants of the country be met without loss.

Experimental growth of exotic trees.

73. Major Mackenzie has continued his experiments with the *grevillea robusta* with fair success at Chikalda, but failure at Ellichpur: he has also increased his stock of India rubber trees (*ficus elastica*), and is now trying to introduce it at Ellichpur. The carab has again been tried at Ellichpur and Basim, but when the seed germinated at the former place, it turned that pink seris seed has been sent by mistake from Hyderabad. At Basim a different lot of seed germinated, but the seedlings died.

Changes in system of Forest accounts, &c.

74. The system of auditing the Forest accounts has been brought into accord with the Forest Department Code during the year, and with reference to this work and office work in general, my thanks are due to Mr. Trimbak Amrut, the Head Clerk, who has been indefatigable in effecting the various alterations.

Health of the Establishment.

75. The health of the subordinates has not been good, owing to bad water, &c. Three deaths from fever occurred in the Melghat Division, and a good many men had to go on sick leave in South Berar.

Fines inflicted in the Department.

76. Fines aggregating Rs. 153 were inflicted on 42 subordinates.

77. The Melghat Forests were formed into a separate division in November, and Mr. Ballantyne was throughout the year in charge. Whether specially with reference to fire conservancy and roads, or generally with regard to the judicious management of a very extensive division, it is impossible to speak too highly of his work, and in saying this I am, I believe, but reiterating your own opinion on the subject

Notice of Forest charges and officers.

Mr. Prevost was in charge of the South Berar Division consisting of the reserves in Akola, Buldana, and Basim. His success in fire conservancy is to be attributed to his persevering efforts to introduce a good system of work, to get it supported by the District Officers, and as far as possible make forest management palatable to the people; and his successful management of his division is rendered more marked by the fact that the fire season of 1881 was, owing to the short rainfall, one of the most trying we have had.

Mr. Stewart was employed in demarcation work in connection with the Amraoti hills and South Akola up to December and in Wun for the last three months of the year. His work at Kelapur has been described, and I need only say that I am glad that the formation of the new division has afforded an opportunity of giving him a definite charge.

Mr. Rasul Khan, Forest Ranger, was appointed a probationer in October 1880: his work, which was satisfactory, has been separately reported on.

I would bring the services of the following subordinates to your special notice :—

Ranger Ahmed Ali, Bairagarh Reserve,

Narayen Dhondo, Gugamal Reserve,

Forester Munir-ud-Din, Ghratbori Reserve,

and hope shortly to submit a scheme for promoting them each a grade.

As a rule, the work of all the upper subordinates is well spoken of.

I have the honour to be,
Sir,
Your most obedient Servant,
C BAGSHAWE,
Offg. Conservator of Forests,
Hyderabad Assigned Districts.

APPENDICES.

FORESTS.

APPENDIX A.—*Statement showing District Reserved and Unreserved Forests under Deputy Commissioners.*

Forest Division.	Districts.	Taluks.	Area of District Reserves.			Unreserved Forest.	Grand total
			Babul buns.	Other buns including ramnas and coppices.	Total		
	Amraoti.	Amraoti	2,092	248	2,340	983	3,323
		Murtazapur ...	1,216	10,952	12,168	6,748	18,916
		Morsi	2,061	1,703	3,764	41,747	45,511
		Chandur	2,040	5,956	7,996	13,194	21,190
		Total ...	7,409	18,859	26,268	62,672	88,940
	Akola.	Akola	547	19,747	20,294	38,475	58,769
		Balapur	639	30,763	31,402	21,904	53,306
		Khamgaon	1,710	...	1,710	15,534	17,244
		Akot	1,254	...	1,254	5,285	6,539
		Jalgaon	1,525	...	1,525	19,610	21,135
		Total ...	5,675	50,510	56,185	100,808	156,993
	Ellichpur.	Ellichpur	2,194	..	2,194	20,253	22,447
		Daryapur	2,297	..	2,297	4,600	6,897
		Total ...	4,491	...	4,491	24,853	29,344
	Buldana.	Chickli	638	4,148	4,786	85,636	90,422
		Mekhar	549	1,877	2,426	92,213	94,639
		Malkapur	550	8,717	9,267	27,364	36,631
		Total ...	1,737	14,742	16,479	205,213	221,692
	Wun.	Yeotmal	417	33,298	33,715	91,613	125,328
		Wun	25	22,549	22,574	141,741	164,315
		Darwha	1,780	38,818	40,598	182,688	223,286
		Kelapur	141	41,496	41,637	125,729	167,366
		Total ...	2,363	136,161	138,524	541,771	680,295
	Basim.	Basim	2,013	9,521	11,534	34,570	46,104
		Pusad	350	2,998	3,348	194,821	198,169
		Mangrul	307	15,531	15,838	64,620	80,458
		Total ...	2,670	28,050	30,720	294,011	324,731
		Grand Total ...	24,345	248,322	272,667	1,229,328	1,501,995

FORESTS.

APPENDIX B.—*Statement showing income realized by Civil Officers from Forests (Reserved and Unreserved) under their control in* 1880-81.

	Amraoti.	Akola.	Ellichpur	Buldana.	Wun.	Basim
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Grazing sales, Rule XIV.	31,017 0 0	7,550 10 0	1,904 10 0	8,258 12 0	...	2,826 11 0
2. Do. „ XV.	14,050 0 0	4,333 8 0	...	204 8 0	...	303 0 0
3. Do. „ XVI.	6,244 8 0	5,582 0 0	150 3 0	8,649 8 0	...	2,001 8 8
4. Grazing cess...		...	...		21,114 15 2	...
Total	51,311 8 0	17,466 2 0	2,054 13 0	17,112 12 0	21,114 15 2	5,131 3 8
5 Grazing in reserves	3,718 8 0		1,781 13 0	...	...	68 11 3
6. From sale of grass	.	12 0 0	...	..	...	1,164 0 0
7 Mango trees, produce of...	2,571 12 9	362 9 0	116 13 0	1,250 7 0	4,225 1 6	175 9 6
8. Mowha trees „		362 8 0	159 7 3			681 15 0
9. Sale of cuttings in Babul buns	282 3 6	25 8 0	942 8 0	...	...	. .
10. Minor forest produce	60 1 9	...	7 12 0	..	121 6 3	117 14 3
11 Passes under Rule II.	...	...	3 7 0	868 8 1	4,317 6 10	1,194 5 0
12. Do „ III.	...	48 1 0	...	814 4 6	...	4,010 11 6
13. Do. „ IV.	221 9 6		...	...	...	
14. Do. „ V.	134 13 6	1,326 1 0	...	627 13 0	178 0 3	1,464 6 9
15. Do. „ VI.	...	...	...	...	...	.
16. Sale of dry and decayed trees	592 10 9	501 0 3	774 7 6	154 0 9	385 11 6	205 8 4
17. Confiscated wood	7 15 9	66 15 9	...			.
18. Fines	..	...	...	...	...	...
19. Miscellaneous ..	10 0 0	27 10 0	...	..	95 10 11	
Grand Total ...	58,911 3 6	20,398 7 0	5,841 0 9	20,827 13 4	30,438 4 5	14,214 5 3

FORESTS.

Appendix C.—*Statement showing the working of the Forest Rules.*

District.	District Forest acres.			Passes granted under Rule II.				Passes granted under Rule III.				Passes granted under Rule IV.				Passes granted under Rule V.			
	Reserved.	Unreserved.	Total.	Area in which granted.	Officer granting.	No. granted.	Amount realized.	Area in which granted.	Officer granting.	No. granted.	Amount realized.	Area in which granted.	Officer granting.	No. granted.	Amount realized.	Area in which granted.	Officer granting.	No. granted.	Amount realized.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs. a. p.				Rs. a. p.				Rs. a. p.				Rs. a. p.
Ellichpur...	4,491	24,853	29,344	...	Patel of one village.	...	3 7 0	...	...	...	...	...	...	...	...	...	...	...	...
Amraoti ...	26,268	62,672	88,940	...	...	..	...	...	...	...	...	18,064	Patels.	681	221 9 6	1,071	...	8	134 13 6
Akola ...	56,185	100,808	156,993	...	...	...	...	51,149	By Patels and Foresters.	9	48 1 0	...	...	...	...	76,753	Patels and Forester.	659	1,526 1 0
Basim ...	30,720	294,011	324,731	30,720	Deputy Commissioner.	11	1,194 5 0	294,011	Tahsildars and Patels of 140 villages.	1,933	4,010 11 6	...	...	...	...	294,011	Patels of 166 villages.	2,107	1,464 6 9
Buldana...	16,479	205,213	221,692	...	Forest ranger.	54	868 8 1	...	Patels of 61 villages.	386	814 4 6	...	...	...	...	...	Patels of 104 villages.	...	627 13 0
Wun ...	138,524	541,771	680,295	...	Tahsildar.	...	4,317 6 10	...	...	...	...	...	...	...	...	...	Tahsildar.	...	178 0 3
Total	272,667	1,229,328	1,501,995	30,720	...	65	6,383 10 11	345,160	...	2,328	4,873 1 0	18,064	...	681	221 9 6	371,835	...	2,774	3,931 2 6

Statement D.

FORESTS.

APPENDIX D.—*Statement showing expenditure by District Officers on account of Forests in* 1880-81.

	Amraoti.	Akola.	Ellichpur.	Buldana.	Wun.	Basim.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Percentage to village officers for collecting grazing dues ...	...	...	110 14 0	...	...	...	110 14 0
Do. do. revenue on fruits ...	...	...	11 11 8	...	...	...	11 11 8
Do. do. passes, Rule I. ...	...	...	...	...	...	...	...
Do. do. do., Rule IV. ...	4,724 8 0	...	...	...	4,959 0 3	216 14 9	9,900 0 0
Do. do. do., Rule V. ...	...	...	...	...	...	...	...
Do. do. do., Rule VI. ...	...	...	...	...	...	...	...
Total ...	4,724 8 0	...	122 9 8	...	4,959 0 3	216 14 9	10,023 0 8
I. Timber and other produce removed from the forests by Government agency—							
(a.) Timber	...	...	...	...	425 3 0	...	425 3 0
(b.) Firewood and charcoal	...	...	...	...	...	...	...
(c.) Bamboos	...	...	...	...	...	...	...
(d.) Sandal wood	...	...	...	...	...	...	..
(e.) Grass and other minor produce	...	...	...	...	...	...	...
II. Timber and other produce removed from the forests by consumers or purchasers	999 0 0	...	306 4 0	157 10 6	...	4 14 5	1,467 12 11
III. Confiscated, drift, and waif wood	...	...	...	...	...	...	...
IV. Revenue from forests not managed by Government—							
(a.) Duty on foreign timber and other forest produce.	...	...	...	...	...	...	...
(b.) Revenue from shared and private forests ...	...	...	...	...	...	...	...
V. Rent of leased forests and payments to shareholders in forests managed by Government	...	...	...	...	...	...	...
VI. Live and Dead Stock—							
(a.) Purchase of cattle	...	...	...	...	...	...	...
(b.) Feed and keep of cattle	3 14 0	...	...	...	...	...	3 14 0
(c.) Plant, tools, and Instruments	...	18 8 0	...	5 0 0	...	6 0 0	29 8 0
VII. Communications and buildings—							
(a.) Roads and bridges	...	...	...	...	...	...	...
(b.) Buildings	...	...	...	...	...	...	...
(c.) Other works	...	...	...	...	...	...	...

VIII. Demarcation, improvements, and extension of forests—							
(a.) Demarcation	106 9 0	...	...	...	...	...	106 9 0
(b.) Compensation for land and rights ...	...	...	...	...	...	...	...
(c.) Surveys and working plans	...	...	...	...	...	...	...
(d.) Plantations	...	...	...	...	...	...	...
(e.) Protection from fire	...	...	...	...	...	...	...
(f.) Other works	2 7 0	145 12 6	...	...	...	...	148 3 6
IX.—Miscellaneous—							
(a.) Refunds	1,595 13 0	...	...	...	...	...	1,595 13 0
(b.) Law charges	...	...	...	...	...	...	...
(c.) Other charges	23 7 9	1 6 0	...	3 1 5	...	...	27 15 2
I.—Salaries—							
(a.) Conservators	...	...	...	...	...	...	...
(b.) Superior officers	...	...	...	...	...	...	...
(c.) Subordinate Forests and Depôt Establishments...	1,529 0 0	937 15 10	763 0 0	869 0 0	3,089 9 7	1,950 2 4	9,138 11 9
(d.) Office Establishments	...	...	...	...	...	...	...
(e.) Deputation and special allowances... ...	...	...	...	...	...	...	...
II. Travelling allowances—							
(a.) Conservators	...	...	...	...	...	...	...
(b.) Superior officers	...	...	...	...	...	...	...
(c.) Subordinate Forests and Depôt Establishments...	...	5 4 0	...	...	...	...	5 4 0
(d.) Office Establishments	...	...	...	...	...	...	...
III. Contingencies—							
(a.) Stationery	...	...	3 0 0	...	2 8 0	0 6 0	5 14 0
(b.) Carriage of tents and records	...	...	...	...	...	...	...
(c.) Rents, rates, and taxes	...	...	24 8 3	...	...	...	24 8 3
(d.) Pay of police guards	...	...	...	...	...	...	...
(e.) Official postage	3 5 0	...	...	5 0 0	...	...	8 5 0
(f.) Sundries	63 0 3	...	...	0 1 0	7 9 6	...	70 10 9
Total ...	4,326 8 0	1,108 14 4	1,096 12 3	1,039 12 11	3,524 14 1	1,961 6 9	13,058 4 4
Grand Total ...	9,051 0 0	1,108 14 4	1,219 5 11	1,039 12 11	8,483 14 4	2,178 5 6	23,081 5 0

APPENDIX E.

Description of Produce.	Kurras or two bullock dragging load.	Cart load.	Camel load.	Bullock, Pony, or Donkey load.	Head load.	Bundles	Number.	Cubic feet of solid wood.	Weight in lbs	Value in Rupees.	Total per budget head.	Budge head.
State Forests.												
Teak, tiwus, and sheshum, removed by Government agency	492½	...	...	...	76	...	900	1,757	...	503	503	I. *a.*
Bamboos do. do.	...	...	...	...	...	...	...	...	...	9	9	I. *c.*
Teak, tiwus, and sheshum, removed by purchasers	1,333	...	...	...	1,216	...	..	5,200	...	1,485	1,569	II. *a.*
Other kind of wood	134	...	...	...	252	...	555,700	579	...	84		
Bamboos	...	...	...	...	...	...	...	...	...	5,557	5,557	II. *c.*
Grass	...	...	...	...	...	...	...	...	...	...	...	...
Grazing dues	...	...	...	...	...	...	...	...	...	...	...	...
Lac	...	...	...	...	85	...	...	...	4,420	32	992	II. *e.*
Roots and fruits	...	...	...	...	15	...	...	...	404,400	960		
Confiscated and waif wood	...	...	...	...	...	...	...	...	...	20	20	III.
Miscellaneous	...	...	...	...	...	...	...	...	...	83	83	V.
Total ...	1,959½	...	...	...	1,644	...	556,600	7,536	408,820	8,733	8,733	
Timber removed by purchasers	...	...	...	...	...	...	...	...	...	10	10	II. *a.*
Bamboos	...	...	...	...	...	...	7,875	...	...	79	79	II. *c.*
Grass	...	...	...	...	...	...	...	...	17,25,025	3,943	3,943	II. *d.*
Miscellaneous	...	...	...	...	...	...	...	...	2	4	4	V.
Total ..	...	...	...	...	...	...	7,875	...	17,252,025	4,036	4,036	
Grand Total ...	1,959½	...	...	...	1,644	...	564,475	7,536	17,660,845	12,769	12,769	
Unreserved Forests.												
Teak, tiwus, and sheshum	42,334	...	...	80	36,621½	...	...	164,331	...	46,952	878	II. *a.*
Other kinds of wood	24,899½	...	...	...	23,633	...	...	97,488	...	13,926		
Firewood	...	12,408	83	15,758	...	...	...	201,869	...	5,126	8,065	II. *b.*
Fuel used for making charcoal	...	361	...	6,748	5,428	...	...	129,404	...	2,939		
Bamboos	...	...	...	...	...	...	1,516,800	...	...	15,168	15,168	II. *c.*
Grass	...	6,855	3	10,859	...	...	...	...	68,99,655	1,792	16,536	II. *d.*
Grazing	...	...	...	...	...	...	...	...	...	14,744		
Lac	...	1	...	6	350	...	...	...	19,670	141	1,357	II. *e.*
Teak leaves	...	...	...	...	...	9,105	...	...	4,73,460	569		
Roots and fruits	...	119	...	965	1,722½	...	...	...	290,842	570		
Gum	...	6	...	8	33½	...	...	...	7,609	32		
Other minor produce	...	13	...	2	127½	...	...	...	17,760	45		
Confiscated, &c., wood	...	...	...	...	...	...	...	...	...	151	151	III.
Miscellaneous	...	...	...	...	...	...	...	...	...	9	9	V.
Total ...	67,233½	19,763	86	34,426	67,915½	9,105	1,516,800	593,092	7,708,996	102,164	1,02,164	

FOREST.

Appendix F.

Districts, &c.	Year.	Camels.	Buffaloes.	Cows and bullocks.	Sheep and goats.	Total.
Melghat and Central Provinces	1879-80	36	5,724	24,431	4,379	34,570
	1880-81	15	6,206	23,422	3,978	33,621
Daryapur and Ellichpur Taluks of Ellichpur District	1879-80	131	5,123	29,934	8,912	44,100
	1880-81	55	9,903	59,205	11,163	80,326
Akola District	1879-80	103	4,735	28,564	6,101	39,503
	1880-81	73	12,373	65,883	7,246	85,575
Total ...	1879-80					118,173
	1880-81					199,522

APPENDIX G.

Return of estimated exports of Timber, &c., from the Melghat Forests, 1872-73 *to* 1879-80.

Produce.		1872-73.			1873-74.			1874-75.			1875-76.			1876-77.		
		C. ft.	No.	Rs. a. p.	C. ft.	No.	Rs. a. p.	C. ft.	No.	Rs. a. p.	C. ft.	No	Rs. a. p.	C. ft	No.	Rs. a. p.
Teak, &c.	State Reserves	...	...	...	...	...	...	...	...	...	...	...	...	25,413	...	7,253 14 0
	Unreserves	40,477	...	1,551 0 0	95,691	...	27,340 1 9	87,826	...	25,628 14 0	57,537	...	16,440 3 6	159,686	...	50,991 9 0
Other kind of wood.	State Reserves	...	...	...	...	...	...	...	...	...	...	...	...	20,314	...	2,902 2 0
	Unreserves	72,424	...	17,262 3 0	168,981	...	25,917 7 6	117,480	...	18,573 12 0	115,528	...	18,565 11 0	94,470	...	13,695 12 9
Bamboos	State Reserves	...	...	...	...	...	...	...	...	...	...	...	...	...	589,955	5,899 8 10
	Unreserves	...	199,697	1,996 15 9	...	967,196	9,671 14 6	...	1,396,116	13,961 2 6	...	1,447,660	14,476 9 0	...	1,304,813	12,375 4 11
Miscellaneous grass, grazing, &c.	State Reserves	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3,603 [illegible]
	Unreserves	...	...	19,544 11 0	...	...	15,432 9 0	...	...	14,966 0 3	...	...	16,171 1 6	...	...	9,575 5 11
	Total	112,901	199,697	50,354 13 9	264,672	967,196	78,362 0 9	205,306	1,396,116	73,129 12 9	173,065	1,447,660	65,653 9 0	299,883	1,894,768	1,06,297 2 9

Return of estimated exports of Timber, &c., from the Melghat Forests, 1872-73 *to* 1879-80—continued.

Produce		1877-78.			1878-79.			1879-80.			Average of 8 years.			1880-81.		
		C. ft.	No.	Rs. a. p.	C. ft.	No.	Rs. a. p.	C. ft.	No.	Rs. a. p.	C. ft.	No.	Rs. a. p.	C. ft.	No.	Rs. a. p.
Teak, &c.	State Reserves	10,542	...	2,635 8 0	30,022	...	7,505 8 0	19,998	...	5,714 0 0	* 21,493	...	5,777 3 6	6,957	...	1,988 0 0
	Unreserves	237,886	...	74,401 14 0	219,153	...	68,485 5 0	254,148	...	72,614 0 0	144,050	...	43,431 9 10	164,431	...	46,952 0 0
Other kind of wood.	State Reserves	14,504	...	2,052 13 10	12,203	...	2,383 8 8	3,947	...	567 0 0	* 12,742	...	1,976 6 1	579	...	54 0 0
	Unreserves	72,143	...	3,893 4 3	85,920	...	6,404 7 0	112,922	...	16,132 0 0	104,983	...	15,055 9 2	97,488	...	13,926 0 0
Bamboos	State Reserves	...	786,860	7,868 10 0	...	377,983	3,779 13 3	...	624,312	6,243 0 0	...	*594,777	5,947 12 1	...	5,56,603	5,566 0 0
	Unreserves	...	984,058	9,284 9 11	...	1,007,896	9,513 6 5	...	1,170,372	11,704 0 0	...	1,059,737	10,372 15 10	...	1,516,800	15,168 0 0
Miscellaneous grass, grazing, &c.	State Reserves	...	...	5,958 8 11	...	...	6,815 12 9	...	...	6,810 0 0	...	...	5,796 15 9	...	...	1,095 0 0
	Unreserves	...	...	18,174 0 11	...	...	17,366 14 4	...	...	15,994 0 0	...	...	15,903 1 4	...	...	26,118 0 0
	Total	335,075	1,770,918	1,24,269 5 10	347,298	1,385,879	1,22,254 11 5	391,015	1,794,684	1,35,778 0 0				269,455	2,073,400	1,10,897 0 0

N. B.—These figures have been obtained by multiplying the number of Karass and other loads by the number of cubic feet, it is believed, average load contains.

*Average of four years only.

APPENDIX H.

No. of Block	Name of Block	Teak.		Dhoura		Haldie.		Kahu		Other kinds.		Total		Area in acres.	Remarks.
		1st Class Trees	2nd Class Trees	1st Class Trees	2nd Class Trees.	1st Class Trees.	2nd Class Trees	1st Class Trees.	2nd Class Trees	1st Class Trees	2nd Class Trees.	1st Class Trees.	2nd Class Trees		
1	Kuapati	354	1,302	87	352	212	180	641	1,110	665	1,561	1,959	4,505	400	
2	Alkund	890	2,572	142	706	257	293	233	444	454	1,672	1,976	5,687	448	
3	Khathera	992	2,119	272	745	250	330	175	366	707	1,848	2,396	5,408	323	
4	Somita	379	826	65	248	69	94	86	94	183	632	782	1,894	147	
5	Kratiar	370	1,185	136	486	205	204	183	259	536	1,664	1,430	3,798	313	
	Total ...	2,985	8,004	702	2,537	993	1,101	1,318	2,273	2,545	7,377	8,543	21,292	1,631	

APPENDIX I.

Extract from Deputy Commissioner, Ellichpur's letter, No. 1081, *dated* 18*th May* 1881, *to the Commissioner, Hyderabad Assigned Districts.*

* * * * *

I should like, for your information and the satisfaction of the officers of the Forest Department, to be allowed to record facts that came to my notice on four different occasions, when recently in the Melghat, which point markedly to the contentment of the people in that direction, and the success that has attended the enlistment of their help and interest in Forest conservancy.

2. Three of the occasions refer to the outbreak of fire in the State Reserves towards Asalwarrah and Gugamal, and towards Kupah in Bairaghar, when I personally witnessed the most rapid concentration of Kurkoos, many from very long distances, who came up in smaller or larger parties quite unbidden, merely on the sight of smoke. On two of these occasions, towards Asalwarrah, and the supposed fire at Gugamal (which, however, turned out to be beyond), there were Kurkoos newly settled in the Gangra valley, who had no forest rights or privileges like their brethren settled in certain villages on the outskirts of the Reserve, and whom it was therefore proposed to pay in money for their trouble, but they declined, saying they had voluntarily turned out, hoping that the privileges given to the older people might be extended to them ; that in return they would always be ready to turn out.

At Kupah, in the neighbourhood of the Pili road, where the jungle was fired by a Bannia of the Department Public Works, and where the appearance of the fire was very alarming, and its extension would have done considerable harm, the rapid concentration of the people, some from extraordinarily long distances, was really very astonishing. The fire broke out late in the afternoon, some six miles from my camp, and I went to a neighbouring hill off the road to judge its position, when I saw over a hundred Kurkoos from my direction alone pass in bodies of five, ten, and more at the double. All of these had come away unbidden, without their evening meal, with only a handful of parched gram, and were out the whole night.

3. The fourth occasion was when most of the Patels of Bairagarh and Amnair met me at Chawarakund, a little more than a fortnight ago—hitherto one of the requests of such an assemblage has invariably been to ask for the curtailment of some portion or other of the reserve, so that more teak (which is getting exhausted in the open tracts) might be available to them ; but on this last occasion, except by one Patel, no such proposition was made. On my asking, somewhat surprised by the reason, why ? several answered that though it was true teak was getting exhausted outside the Reserves, yet the preservation of bamboos *within the reserves* compensated them in a way they had not formerly foreseen ; that more bamboos could now be got than, owing to the destruction by fire, was ever formerly possible ; and that this to them was of great value. It was a decided advance and very pleasing to me to see that the value of our forests was thus beginning to be recognized.

* * * * *

(True Extract,)

C. BAGSHAWE,

Offg. Conservator of Forests,

Hyderabad Assigned Districts.

FORESTS.

APPENDIX J.

Months.	Chickalda. Mean of Hygrometer. 10 A. M. Dry bulb.	Chickalda. Mean of Hygrometer. 10 A. M. Dry bulb.	Chickalda. Mean of Hygrometer. 4 P. M. Dry bulb.	Chickalda. Mean of Hygrometer. 4 P. M. Wet bulb.	Makla. Mean of Hygrometer. 10 A. M. Dry bulb.	Makla. Mean of Hygrometer. 10 A. M. Wet bulb.	Makla. Mean of Hygrometer. 4 P. M. Dry bulb.	Makla. Mean of Hygrometer. 4 P. M. Wet bulb.	Chickalda. Mean of Thermometer. 10 A. M. Dry Maximum.	Chickalda. Mean of Thermometer. 10 A. M. Dry Minimum.	Chickalda. Mean of Thermometer. 10 A. M. Wet Minimum.	Makla. Mean of Thermometer. 10 A. M. Dry Maximum.	Makla. Mean of Thermometer. 10 A. M. Dry Minimum.	Makla. Mean of Thermometer. 10 A. M. Wet Minimum.	Chickalda. Rain-fall. Inches.	Chickalda. Rain-fall. Cents.	Chickalda. Rain-fall. No. of rainy days.	Makla. Rain-fall. Tree Gauge. Inches.	Makla. Rain-fall. Tree Gauge. Cents.	Makla. Rain-fall. Tree Gauge. No. of rainy days.	Makla. Rain-fall. Ground Gauge. Inches.	Makla. Rain-fall. Ground Gauge. Cents.	Makla. Rain-fall. Ground Gauge. No. of rainy days.	Raipur. Rain-fall. Inches.	Raipur. Rain-fall. Cents.	Raipur. Rain-fall. No. of rainy days.	Pili. Rain-fall. Inches.	Pili. Rain-fall. Cents.	Pili. Rain-fall. No. of rainy days.	Patia. Rain-fall. Inches.	Patia. Rain-fall. Cents.	Patia. Rain-fall. No. of rainy days.	Ganesh Chowky. Garu Mattergaon. Inches.	Ganesh Chowky. Garu Mattergaon. Cents.	Ganesh Chowky. Garu Mattergaon. No. of rainy days.	Butchwady. Ghat Bori. Inches.	Butchwady. Ghat Bori. Cents.	Butchwady. Ghat Bori. No. of rainy days.	Marwady Kurd. Penganga. Inches.	Marwady Kurd. Penganga. Cents.	Marwady Kurd. Penganga. No. of rainy days.	Darati. Kinwat. Inches.	Darati. Kinwat. Cents.	Darati. Kinwat. No. of rainy days.
April 1880 ...	87·9	63·3	93·5	65·9	82·7	62·5	92·5	64·3	88·7	74·3	57·6	91·2	74·1	61·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1
May " ...	84·7	65·2	91·2	66·8	...	...	...	...	86·3	73·2	61·6	89·0	75·6	63·8	...	37	3	...	20	3	...	23	3	...	...	...	...	54	3	...	...	...	...	...	...	...	...	...	1	25	2	...	...	...
June " ...	77·1	66·3	83·3	68·3	73·6	70·0	78·2	72·0	80·9	69·4	63·4	80·3	72·6	67·1	7	37	13	4	28	11	4	28	11	5	40	10	5	89	10	4	2	9	2	45	6	5	51	9	4	35	11	2	18	11
July " ...	68·9	67·4	73·4	69·5	72·0	68·2	74·2	71·2	71·9	65·6	64·5	74·9	67·7	66·4	4	59	24	8	70	21	8	92	21	6	24	20	4	92	16	2	3	15	4	75	11	4	47	13	5	24	17	4	53	17
August " ...	68·9	67·1	73·0	69·0	69·8	64·7	74·8	71·0	70·9	64·2	63·4	78·0	66·2	65·5	7	41	14	9	83	14	10	7	14	8	48	14	7	78	13	6	14	10	1	25	5	2	20	3	3	84	8	3	83	10
September " ...	69·4	67·4	71·4	68·3	70·8	69·0	74·2	71·2	70·0	64·6	63·5	71·8	66·4	65·7	15	66	16	21	22	17	21	88	17	27	12	16	19	39	18	24	51	19	11	55	16	12	...	17	9	74	18	7	23	21
October " ...	75·5	64·4	75·8	64·5	72·9	66·7	77·7	69·1	75·7	65·6	58·6	73·8	66·5	62·3	3	49	5	3	67	5	3	66	5	5	4	5	3	21	5	2	46	6	3	30	4	1	...	2	1	63	5	...	41	3
November " ...	68·9	58·6	69·2	59·6	65·6	58·4	73·9	63·9	69·8	58·2	52·6	66·7	58·9	54·3	1	92	4	1	13	5	1	19	5	1	49	3	...	65	3	...	...	...	4	50	4	3	98	5	2	7	4	2	50	3
December " ...	66·5	55·1	68·3	56·4	63·6	55·7	73·5	61·0	67·6	54·7	48·8	65·3	55·4	51·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
January 1881 ...	67·6	55·2	71·2	57·1	65·4	55·1	72·9	67·0	...	56·3	48·2	66·9	54·0	51·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
February " ...	73·2	57·2	77·3	58·4	71·6	59·1	79·5	63·9	82·8	61·8	50·7	73·2	62·3	54·9	...	...	...	...	6	1	...	7	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
March " ...	75·0	59·1	80·6	60·7	74·8	61·2	82·6	64·9	87·1	63·8	52·3	76·8	65·0	55·4	1	43	2	...	86	3	1	2	3	...	...	...	...	71	3	...	...	...	...	...	...	...	20	1	...	94	2	1	82	3
Total ...	73·6	62·2	77·4	63·7	71·1	62·8	77·6	67·2	77·4	64·3	57·1	75·6	65·4	59·9	42	24	81	49	95	80	51	32	80	53	77	68	43	9	71	39	16	59	27	80	46	29	36	50	29	6	67	22	54	69

FORESTS.

ANNUAL FORM No. 45 .—*Area of Reserved Forests*, 1880-81.

Division or Range.	Name of Forest.	Area on 1st April 1880.		Added during the year.		Excluded or transferred to other heads.		Total on 31st March 1881.		Number and date of Notification of additions and transfers, &c.	Remarks.
		Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.		
	DEMARCATED STATE FORESTS.										
	Ellichpur District, Melghat.										
Northern Division ...	Bairagarh Reserve	425	272,049	...	...	425	272,049	...	...	*Residency Orders* No. 1, dated 3rd January 1881.	
	Gugamal do.	180	115,200	..	...	180	115,200		..	Do. do. do.	
	Ellichpur District, Melghat.										
Melghat Division	Bairagarh Reserve ...		...	425	272,049	...	...	425	272,049	Do. do. do.	
	Gugamal do.	...	..	180	115,200	...	.	180	115,200	Do. do. do.	
	Chikalda do.	...	...	4	2,400	...	..	4	2,400	Commissioner's No. 115, dated 12th January 1880, to the Deputy Commissioner, Ellichpur.	
	Amraoti District.										
Amraoti Range ...	Amraoti Hill Reserve	...	.	78	49,847	...	..	78	49,847	Secretary for Berar to the Resident's No. 2051, dated 22nd April 1881.	(1) Potkarab added ... ... 121 Rumnas added 6,126
	Buldana District.										
	Garumatergaon Reserve ...	72	45,992		..	...	.	72	45,992		
	Akola, Basim, and Buldana Districts.										
South Berar Division ...	Ghatbori Reserve	37	23,840	...	...	...	*80	37	23,760	* Government of India No. 99-F., dated 31st January 1881, to the Resident at Hyderabad.	(2) Free grazing resumed, *vide* Secretary for Berar to the Resident's No. 205, dated 22nd April 1881... ... ... 6,703 12,829
	Basim District.										
	Penganga Reserve	18	11,575	...	...	...	...	18	11,575	Commissioner's No. 3602, dated 23rd July 1880, to the Deputy Commissioner, Basim.	
	Kinwat do	85	54,236	.	...	3	*1,678	82	52,558		
	Wun District.										
Wun Division.. ..	Kelapur Reserve	...	...	64	40,747	...	...	64	40,747	Secretary for Berar to the Resident's No. 959, dated 10th May 1881.	(3) Rumnas added 4,946
	District Reserved Forests.										
Northern Division	Ellichpur District	7	4,370	...	(1) 121	(a) 7	4,491	...	.	(a) Commissioner's No. 5699, dated 26th November 1880, transferring to Direction Division.	(4) Babul Buns added, Commissioner's No. 349, dated 15th July 1879 ... ... 11 Potkarab added 9 20
	Amraoti do.	111	70,745	20	(2) 12,829	131	83,574	...	...		
	Akola do.	87	55,487	7	(3) 4,946	94	60,433	...	...		
South Berar Division ...	Buldana do.	26	16,459	...	(4) 20	26	16,479	...	...		
	Wun do.	292	186,997	...	(5) 251	292	187,248	...	...		
	Basim do.	48	30,713	...	(6) 7	48	30,720	..	...		
	Ellichpur do.	...	...	7	4,491	...	...	7	4,491		
	Amraoti do.	...	...	131	83,574	(b) 90	57,306	41	26,268	(b) Secretary for Berar to the Resident's No. 2051, dated 22nd April 1881. Transferred as Amraoti Hill Reserve ... 49,847 Unreserved area administered in Amraoti Range 7,456 Excluded for Amraoti 57,306	(5) Babul Buns added 251
Direction Division ...	Akola do.	...	...	94	60,433	(c) 6	4,248	88	56,185	(c) Cultivation erroneously included in 1879-80... 4,248	(6) Erroneously omitted in previous years.
	Buldana do.	...	...	26	16,479	...	...	26	16,479		
	Wun do.	...	...	292	187,248	(d) 76	48,724	216	138,524	(d) Secretary for Berar to the Resident's No 759, dated 10th May 1881, Khelapur. Reserve transferred to Wun Division ... 40,747 Do. to District Unreserved Forests 7,977 48,724	
	Basim do.	...	...	48	30,720	...	...	48	30,720		
	Total ...	1,388	887,663	1,376	881,362	1,378	882,230	1,386	886,795		

FOREST.

ANNUAL FORM No. 45.—*Area of Unreserved Forests*, 1880-81.

Division or Range.	Name of Forest	Area on 1st April 1880. Square miles.	Area on 1st April 1880. Acres.	Added during the year. Square miles.	Added during the year. Acres.	Excluded or transferred to other Heads. Square miles.	Excluded or transferred to other Heads. Acres	Total on 31st March 1881. Square miles.	Total on 31st March 1881. Acres.	No. and date of Notification of additions and transfers, &c.		Remarks.
	DISTRICT UNRESERVED FORESTS.											
	Ellichpur District.											
Northern Division.	Melghat Taluk and part of Ellichpur ..	927	593,226	...	..	927	(a) 593,226	...	...	(a) Transferred to Melghat Taluk in Melghat Division	588,800	
										Do. Ellichpur Taluk in Melghat Division	6,289	(1) Erroneously omitted in 1879-80 ... 611
	Part of Ellichpur and Daryapur Taluk ...	44	27,996	1	(1) 611	45	(a) 28,607	...	...	Do. Daryapur Taluk in Melghat Division	1,591	
	Amraoti District ...	136	86,864	...	...	136	(b) 86,864	...	...	Do. Direction Division in Ellichpur District	25,153	(2) Do. do. ... 2,217
	Akola do. ..	172	110,098	3	(2) 2,217	175	(b) 112,315	...	...		621,833	(3) Decrease in cultivation 11,651
Southern Division.	Buldana do. ...	307	196,570	18	(3) 11,651	325	(b) 208,221	...	...	(b) Transferred to Direction Division.		
	Wun do. ...	919	588,039	12	(4) 7,977	931	(b) 596,016	...	...	(c) Chickalda Reserve transferred to State Reserve	2,400	(4) Transferred from old Kelapur Reserve 7,977
	Basim do. ...	472	301,822	...	...	472	(b) 301,822	...	...	(d) Erroneously included in 1879-80 ...	474	
	UNRESERVED FORESTS.											
	Ellichpur District.									(e) Increase in cultivation	179	(5) See remark *a*.
Melghat Division.	Melghat Taluk ..	...	...	920	(5) 588,800	4	(c) 2,400	916	586,400	Patkarab transferred to District Reserves	121	(6) Do. *g*.
	Ellichpur do. ...	...	...	10	(8) 6,289	1	(d) 474	9	5,815		300	(7) Transferred from Amraoti District Reserve 7,456
	Daryapur do. ...	...	...	3	(5) 1,591	...	...	3	1,591			
	Akola District.											
	Akot Taluk	...	...	2	(6) 1,460	...	...	2	1,460	(f) Increase in cultivation	17,489	
	Jalgaon do. ...	...	...	7	(6) 4,476	...	...	7	4,476	Free grazing to Amraoti Hill Reserve	6,703	
	Amraoti District											
Amraoti Range.	Amraoti Taluk ...	...	...	6	(7) 4,048	...	...	6	4,048		24,192	(8) See remark *a*.
	Chandur do. ..	...	...	5	(7) 3,408	...	...	5	3,408	(g) Transferred to Melghat Division.		
	DISTRICT UNRESERVED FORESTS.									Akola Taluk	1,460	(9) Do. *b*.
										Jalgaon Taluk	4,476	
Direction Division.	Ellichpur District ...	...	...	39	(8) 25,153	...	(e) 300	39	24,853	Transferred as rumnas to District Reserves	4,946	
	Amraoti do. ..	...	...	136	(9) 86,864	38	(f) 24,192	98	62,672	Increase in cultivation	625	
	Akola do. ...	...	...	175	(9) 112,315	17	(g) 11,507	158	100,808			
	Buldana do. ...	...	..	325	(9) 208,221	4	(h) 3,008	321	205,213		11,507	
	Wun do. ...	...	...	931	(9) 596,016	84	(i) 54,245	847	541,771	(h) Increase in cultivation... ...	3,008	
	Basim do. ...	...	...	472	(9) 301,822	13	(j) 7,811	459	294,011	(i) Do. do.	54,245	
	Total ...	2,977	1,904,615	3,065	1,962,919	3,172	2,031,008	2,870	1,836,526	(j) Do. do.	7,811	

FORESTS.

ANNUAL FORM No. 46.—*Area of Plantations*, 1880-81.

Division.	Name of Plantation.	On 1st April 1880.		During 1880-81.		On 31st March 1881.		Remarks.
		Area.	Total cost.	Area added.	Cost.	Total area.	Total cost.	
		Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	
	Bairagarh Reserve.							
Melghat Division.	Pili	52	2,058	...	40	52	2,098	Teak.
	Rakiadoh	13	2,163	...	...	13	2,163	Teak and bamboo.
	Sembadoh	2	28	...	...	2	28	Do.
	Dugapati	11	435	...	...	11	435	Do.
	Pipalcota	160	5,083	...	...	160	5,083	Do.
	Saoli	110	4,860	...	...	110	4,860	Do.
	Bujru	31	2,259	...	...	31	2,259	Do.
	Labu	279	3,972	...	...	279	3,972	Teak.
	Saoli and Kurita ...	30	2,233	...	...	30	2,233	Do.
	Jambulwari	600	4,325	...	..	600	4,325	Do.
	Abapur	120	5,072	...	...	120	5,072	Teak & bamboo.
	Kolkaz	1	320	...	367	1	687	Bamboo.
	Total ...	1,409	32,808	...	407	1,409	33,215	
Do.	Raniaola	...	635	...	...	...	...	Failures.
	Kurita	...	515	...	...	...	...	
	Nurseries	3	1,728	...	...	...	...	
	Bibabulda	..	1,020	...	...	...	...	
	Total ...	1,412	36,706	...	407	...	...	
	Amraoti District.							
Melghat Division.	Bhiwapur							
	Cherori							
	Mahdeokora							
	Seonikhurd							
	Amraoti	...	4,200	...	...	...	...	Failures.
	Barmi							
	Morgaon							
	Jawer							
	Lontek	92	254	...	...	...	...	Failures.
	Total ...	92	4,454	...	...	...	...	
South Berar Division.	Experimental plantation in South Berar ...	...	906	...	...	...	...	Failures.
	Kinwat Reserve ...	...	2,184	...	751	...	...	
	Total ...	...	3,090	...	751	...	...	
	Grand Total ...	1,504	44,250	...	1,158	1,409	33,215	

FORESTS.

FORM No. 47.—*Area of Forest tracts protected from fire during dry season* 1880-81.

Division	Forest tracts.	Up to 30th June 1880		During dry season of 1880-81.				Total cost up to 30th June 1881.	Year when protection commenced.	Remarks
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures	Actually protected.	Amount expended.			
		Acres.	Rs.	Acres.	Acres.	Acres.	Rs.	Rs.		
Melghat Division.	Melghat Raipur block of the Bairagarh Reserve.	14,231	5,768	14,231	...	14,231	115	5,883	1870	
	Remainder of the Bairagarh Reserve.	256,538	2,608	257,818	361	257,457	1,034	3,642	1872	
	Gungamal Reserve.	115,200	1,942	115,200	243	114,957	223	2,165	1877	
	Chikalda Station Reserve.	...	...	2,400	...	2,400	19	19	1880	Protected by Gugamal establishment in 1880, and not shown in return for that year.
Amraoti Range.	Amraoti Hill Reserve.	...	...	9,408	400	9,008	86	86	1881	
	Total ...	385,969	10,318	399,057	1,004	398,053	1,477	11,795		
South Berar Division.	Garumaterga on Reserve.	40,192	1,847	45,992	1,300	44,692	544	2,391	1880	Imperfectly protected 1874 to 1879.
	Ghatbori Reserve	12,380	1,203	23,840	1,000	22,840	353	1,556	1881	Do. do. 1874 to 1880
	Penganga do.	10,375	1,186	11,575	1,450	10,125	192	1,378	1880	Do. do. 1874 to 1879.
	Kinwat do.	9,336	1,577	52,558	806	51,752	460	2,037	1881	Do. do. 1876 to 1880
	Total ...	72,283	5,813	133,965	4,556	129,409	1,549	7,362		
Wun Division.	Kelapur do.	...	345	31,650	3,434	28,216	103	448	1881	Partially protected 1874 to 1880.
	Total ...	72,283	6,158	165,615	7,990	157,625	1,652	7,810		
	Grand Total ..	458,252	16,476	564,672	8,994	555,678	3,129	19,605		

Charged in previous years..	15,583
Do. 1880-81	3,373
Do. 1881-82	649
Total ...	19,605

ANNUAL FORM No. 48.—*Prosecutions for breaches of Forest Rules,* 1880-81.

Forest Division and Civil Districts	Injury to forests by fire.		Unauthorized felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total.			
									Prosecutions.		Convictions	
	Cases	Persons	Cases.	Persons.	Cases.	Persons.	Cases	Persons.	Cases	Persons.	Cases	Persons.
Ellichpur District	...	...	10	13	2	2	...	...	12	15	5	6
Amraoti do.	...	...	24	77	..	...	...	...	24	77	20	61
Akola do.	...	...	10	10	3	4	10	10	23	24	23	24
Buldana do.	...	...	18	84	...	...	1	5	19	89	16	82
Basim do.	...	...	26	31	...	...	1	2	27	33	22	27
Wun do.	...	...	47	79	...	...	...	...	47	79	35	62
Melghat Division.												
Reserved Forests	1	6	10	71	...	...	...	...	11	77	10	36
Unreserved do.	...	...	...	...	...	...	161	334	161	334	137	264
Amraoti Range	...	...	...	...	...	...	...	...	...	...	...	...
South Berar Division												
Reserved Forests	1	1	4	5	3	5	8	25	16	36	12	29
Wun Division ..	...	...	..	...	...	...	...	...	...	.	...	...
	2	7	149	370	8	11	181	376	340	764	280	591

FORESTS.

ANNUAL FORM No. 49.—*Summary of Revenue of the different divisions*, 1880-81.

Budget Head Receipts.	Direction Division.	Melghat Division.	South Berar Division	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—*Timber and other produce removed from the forests by Government Agency:—*				
a. Timber	...	503 4 0	...	503 4 0
b. Firewood and charcoal	...	...	...	...
c. Bamboos	...	9 0 0	...	9 0 0
d. Sandal wood	...	...	...	...
e. Grass and other minor produce ...	..	...	...	...
II.—*Timber and other produce removed from the forests by consumers or purchasers:—*				
a. Timber	2,353 14 1	62,498 5 8	4,260 11 10	69,112 15 7
b. Firewood and charcoal	2,679 8 9	9,718 2 6	1,460 12 9	13,858 7 0
c. Bamboos	135 4 0	20,761 11 3	637 8 0	21,534 7 3
d. Grazing and fodder grass	18,163 6 2	76,572 4 10	46,693 15 5	1,41,429 10 5
e. Other minor produce	2,133 10 6	5,672 11 2	8,964 11 10	16,771 1 6
III.—*Confiscated, drift, and waif wood* ...	343 11 3	729 14 0	417 7 9	1,491 1 0
IV.—*Revenue from forests not managed by Government:—*				
a. Duty on foreign timber and other forest produce	...	...	...	...
b. Revenue from shared and private forests..	...	..	...	...
V.—*Miscellaneous:—*				
a. Fines and forfeitures	0 14 0	4 1 6	2 6 0	7 5 6
b. Refunds	87 8 1	38 13 5	87 14 1	214 3 7
c. Other sources	359 13 6	1,012 12 6	251 12 9	1,624 6 9
Total ..	26,257 10 4	1,77,521 0 10	62,777 3 5	2,66,555 14 7

Summary of Expenditure of the different divisions, 1880-81.

BUDGET HEADS—A—Conservancy and Works.	Direction Division.	Melghat Division.	Southern Division.	Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs a. p.	Rs. a. p.	Rs. a. p
I.—*Timber and other produce removed from the forests by Government Agency:—*					
a. Timber	...	103 0 0	...	...	103 0 0
b. Firewood and charcoal	...	...	...	...	..
c. Bamboos	...	...	.	...	...
d. Sandal-wood	...	...	...	...	...
e. Grass and other minor produce ...	...	..	...	...	...
II.—*Timber and other produce removed from the forests by consumers or purchasers* ..	8,117 5 8	4,766 4 5	3,029 10 11	...	15,913 5 0
III.—*Confiscated, drift and waif-wood* ..	...	...	...	...	...
IV.—*Revenue from forests not managed by Government:—*					—
a. Duty on foreign timber and other forest produce	...	...	...	...	...
b. Revenue from shared and private forests ...	...	.	...	...	...
V.—*Rent of leased forests and payments to shareholders in forests managed by Government* ...	...	17,119 12 0	...	...	17,119 12 0
VI.—*Live and dead stock:—*					
a Purchase of cattle	...	..	..	...	...
b. Feed and keep of cattle	399 5 3	1,486 1 2	728 0 2	...	2,613 6 7
c. Plant, tools and instruments	255 6 0	207 12 2	47 7 0	By transfer 55 11 6	566 4 8
VII.—*Communication and buildings:—*					
a. Roads and bridges	...	8,431 12 6	100 5 0	...	8,532 1 6
b. Buildings	665 10 4	512 6 0	505 12 6	...	1,683 12 10
c. Other works	..	184 4 9	3 1 9	...	187 6 6
VIII.—*Demarcation, improvement and extension of forests:—*					
a. Demarcation	1,408 10 1	360 12 0	436 14 0	...	2,206 4 1
b. Compensation for land and rights ...	...	...	...	...	...
c. Surveys and working plans	...	76 2 0	..	...	76 2 0
d. Plantations	...	547 11 7	755 0 3	...	1,302 11 10
e. Protection from fire	107 11 6	1,905 13 7	1,358 15 10	...	3,372 8 11
f. Other works	106 5 6	353 13 8		...	460 3 2
IX.—*Miscellaneous:—*					
a. Refunds	70 13 7	1,595 13 0	...	...	1,666 10 7
b. Law charges	...	...	1 10 0	...	1 10 0
c. Other charges	79 11 9	1,307 2 6	142 11 6	...	1,529 9 9
Total A.—Conservancy and works A..	11,210 15 8	38,958 9 4	7,109 8 11	55 11 6	57,334 13 5

FORESTS.

ANNUAL FORM No. 49.—*Summary of expenditure of the different divisions,* 1880-81.

BUDGET HEADS.—B—Establishments.	Direction Division.	Melghat Division.	Southern Division.	Division by transfer.	Total.
	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward, Total A. Conservancy and Works.	11,210 15 8	38,958 9 4	7,109 8 11	55 11 6	57,334 13 5
I.—*Salaries* :—					
a. Conservators ...	3,500 0 0	4,900 0 0	...	...	8,400 0 0
b. Superior Officers ...	1,750 0 0	8,391 15 0	5,300 0 0	...	15,441 15 0
c. Subordinate Forest & Depôt Establishments	5,851 5 10	16,257 5 7	7,062 11 2	...	29,171 6 7
d. Office Establishments	1,456 8 11	4,581 5 1	1,352 0 2	...	7,389 14 2
e. Deputation and Special Allowances.	...	...	...	...	.
II.—*Travelling Allowances* :—					
a. Conservators ...	1,088 5 0	26 0 0	...	...	1,114 5 0
b. Superior Officers ...	697 10 0	1,980 12 9	1,308 12 0	...	3,987 2 9
c. Subordinate Forest & Depôt Establishments	17 10 10	80 5 11	...	...	98 0 9
d. Office Establishments.	320 11 0	310 10 10	287 9 5	...	918 15 3
III.—*Contingencies* :—					
a. Stationery	350 0 0	180 12 9	41 6 0	...	572 2 9
b. Carriage of tents and records.	605 10 10	896 9 11	375 2 1	...	1,877 6 10
c. Rents, rates and taxes	8 8 3	216 0 0	...	...	224 8 3
d Pay of police guards.	163 0 0	297 0 1	...	...	460 0 1
e. Official postage ...	145 1 6	368 13 0	104 8 0	...	618 6 6
f. Sundries	166 4 10	693 9 7	321 1 4	156 6 9	1,337 6 6
Total B.—Establishments...	16,120 13 0	39,181 4 6	16,153 2 2	156 6 9	71,611 10 5
Grand Total of Expenditure.	27,331 12 8	78,139 13 10	23,262 11 1	212 2 3	1,28,946 7 10

ANNUAL FORM No. 52.—*Statement of outstandings on account of Revenue* 1880-81.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.
			Rs. a p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Melghat ...	...	...	512 4 0	512 4 0	512 4 0	...
	Total ...	...	512 4 0	512 4 0	512 4 0	...

ANNUAL FORM No. 55.—*Statement of timber and other produce brought to depôt from the different Forest Divisions,* 1880-81.

Division.	Forest.	Description of Timber, &c.	No. of Pieces.	No. of Cubic feet.	Total of each Division. Pieces.	Total of each Division. Cubic feet.	Remarks.
Melghat ..	Bairagarh.	Teak ..	747	1,753½	749	1,757	
		Tiwus ...	2	3½			
		Bamboos ...	900	...	900	...	
		Total ...	1,649	1,757	1,649	1,757	

FORESTS.

ANNUAL FORM No. 56.—*Account of timber and other produce,* 1880-81.

Particulars.	Pieces.		Total.		Particulars.	Pieces.		Total.	
	No.	Cub. ft.	No.	Cub. ft.		No.	Cub. ft.	No.	Cub. ft.
MELGHAT DIVISION.									
Teak.									
Balance	...	...	...	...	Removed ...	747	1,753½	747	1,753½
Received during the year	747	1,753½	747	1,753½	Balance... ...	...	...	...	...
Total ...	747	1,753½	747	1,753½	Total ...	747	1,753½	747	1,753½
Tiwus.									
Balance	...	...	...	...	Removed ...	2	3½	2	3½
Received during the year	2	3½	2	3½	Balance	...	..	...	...
Total ...	749	1,757	749	1,757	Total ...	749	1,757	749	1,757
Bamboos.									
Balance	...	...	...	...					
Received during the year	900	...	900	...	Removed ...	900	...	900	...
					Balance	...	...	...	...
Total ...	900	...	900	...	Total ...	900	...	900	...
Grand Total ...	1,649	1,757	1,649	1,757	Grand Total ...	1,649	1,757	1,649	1,757

ANNUAL FORM No. 57.—*Statement showing the amount realized on account of the different classes of timber and other produce sold during* 1880-81.

Division.	Description of timber, &c.	Number of pieces, &c., sold.	Cubic contents.	Amount realized and due on account of sales.	Average amount per log, &c.	Average cubical contents of log.	Average amount per cubic foot.
		Rs.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Melghat ...	Teak ...	747	1,753½	502 4 0	0 10 9	...	...
	Tiwus ...	2	3½	1 0 0	0 8 0	...	...
	Bamboos ...	900	..	9 0 0	1 per 100	...	...
	Total ...	1,649	1,757	512 4 0	...	...	..
Deduct— Amount due but not realized during year ...				...			
Balance ...				...			
Add— Amount realized on account of former years.				...			
Total shown as revenue on account of sales under Budget Head ...				512 4 0			

ANNUAL FORM No. 60.—*Abstract showing the value of Timber and of Live and Dead Stock for the year* 1880-81.

Description of timber and other stock	On hand at the commencement of the year.		Received during the year.		Total.		Sold, otherwise disposed of and lost during the year, and allowance for depreciation.		On hand at close of year.		Cause of loss and other particulars
	No	Value	No	Value.	No	Value.	No.	Value.	No	Value.	
Melghat Division				Rs a. p.		Rs. a. p		Rs. a. p.			
Teak ..	...	...	747	502 4 0	747	502 4 0	747	502 4 0	..	...	
Tiwus ...	...	...	2	1 0 0	2	1 0 0	2	1 0 0	..	...	
Bamboos ...	...	...	900	9 0 0	900	9 0 0	900	9 0 0	..	...	
Total ...	...	...	1,649	512 4 0	1,649	512 4 0	1,649	512 4 0	...	...	

AMRAOTI,
The 17th August 1881.

C. BAGSHAWE,
Offg. Conservator of Forests,
Hyderabad Assigned Districts.

Extract from the Proceedings of the Resident at Hyderabad, No. 2456, dated Hyderabad Residency, the 8th November 1881.

READ—

The Report of the Conservator of Forests of the Hyderabad Assigned Districts, for the year 1880-81.

RESOLUTION.

THIS Report is unquestionably the best report on forest administration that has ever been received from Berar. It not only supplies a complete account of the work done during the year, but it also indicates the lines on which forest administration should in future advance. It affords in almost every part of it evidence of the thoroughly competent manner in which Mr. Bagshawe has superintended the working of his department.

2. The same reasons which led Mr. Jones (as Commissioner) to abstain from attempting any very detailed review of the Forest Report of 1879-80, apply to that which he has now to submit to Government. The year has been distinctly one of progress; there are no important shortcomings or failures to account for; numerous questions (*e. g.*, that of the Amraoti Hills Reserve, the Kelapur Reserve, the Kinwat Reserve), which have been long pending, have been disposed of. The Officiating Resident will therefore only touch very briefly on a few points on which a word of comment from him may seem to be required.

3. In this office letter No. 414 of the 31st ultimo, a proposal was submitted to Government for keeping Mr. Bagshawe in Berar for some months after Mr. Drysdale's return from leave, with a view to his undertaking the task of classifying district forests. This matter, which is referred to in paras. 56—62 of the Report, is one of the most important of all the problems which lie before us in connection with forest administration in Berar. The object of, and necessity for, the classification are explained in the letter above quoted. It is hoped that next year's Report will show that good progress has been made in the work.

4. The Conservator had drawn up with much care a set of notifications and rules intended to accompany the introduction of the Forest Act into Berar, but, having attended the Forest School course, he showed his draft rules to Mr. Baden Powell (Mr. Jones had only seen them in the rough and had not finally approved of them) who, after examining them, addressed the Commissioner demi-officially, urging that the Act should not be introduced; but that a set of rules suited to the circumstances of Berar should be drafted and introduced instead. This proposal was not new, and as it involved the retracing of steps already taken, and after much correspondence, with the intention of introducing the Act itself, it might not have received Mr. Jones' entire concurrence, but for the fact that Mr. Baden Powell accompanied his objections to Mr. Bagshawe's proposals, by an offer to draw up a set of rules for Berar himself. He also mentioned that the Forest Act had been found to stand in need of considerable amendment.

The Officiating Resident had urged that the Act itself should be introduced with suitable modifications, and that Berar should thus be brought into line with other provinces; but when he learnt that the Act might have to be amended and received Mr. Baden Powell's kind offer; and in particular when he remembered the admirable way in which Mr Baden Powell had treated the land tenures and Revenue system of Berar, in his work on the Land Tenures of India, he felt that he could not do better than accept Mr. Powell's offer, and he accordingly submitted it to Government in this office letter No. 400, dated 19th ultimo.

5. The question of opening out roads in the Melghat through the agency of the Forest Department was discussed during the year, and it was finally determined that so long as the Administration has the advantage of Mr. Ballantyne's great knowledge of the country and proved aptitude for this special kind of

work, the task of opening out feeder roads should be left to the Forest Department. The settlement of this question was much facilitated by a visit which the Secretary to the Resident, in the Department of Public Works, paid to Chickalda during the year. His tour in the Melghat enabled Colonel Lindsay to inspect the work that had been accomplished, and to satisfy himself that, in Mr. Ballantyne's hands, whatever money is laid out in road-making, will be skilfully and economically expended.

6. The valuation surveys referred to in paras. 12 and 34 of the Report will be extremely useful. They were undertaken in the first instance with a view to ascertain whether steam sawing machinery could be profitably worked in the Melghat, but they are an almost indispensable help to intelligent forest administration, and will be useful in many other ways.

7. The Officiating Resident desires to acknowledge the ready and liberal spirit in which the Conservator of Forests and Forest Officers generally responded to applications made to them by Civil Officers during the anxious months of July and August, when, the rains having failed, the people were in difficulties about fodder for the cattle. Liberality on an occasion like this does a great deal to make the department popular with the people. The figures given in Appendix F, will in part show how severe the distress was. Cattle were driven in immense numbers from the plains to the hills, but a considerable number died from the effects of a strange climate and want of water. An officer of the Public Works Department has been deputed to report on the means that should be taken to extend the sources from which cattle may obtain water in the Melghat. The statistics of the rain-fall fully account for the decrease in grazing revenue referred to in para. 13.

8. A great deal has been done during the year in the way of preparing exact and useful maps of Forest Reserves and their environs. A proposal has also been made (see para. 69 of the Report) to make a forest survey of the Melghat. This scheme is still under discussion.

9. The Officiating Resident concurs in the views expressed in para. 72 regarding timber depôts, but would express his hope that the plan advocated by the Conservator will be fully tried. Depôts almost inevitably involve loss to Government, but without something in their place, the people suffer extreme inconvenience. By Mr. Bagshawe's plan a man wanting timber will be able to go and buy it without trouble, whereas in default of some such arrangement he would probably have to go to a tahsil for a license, and then wait on the convenience of some forest guard before getting it.

10. The Deputy Commissioner of Ellichpur has done good service in examining the babul buns of his district and showing what they really consist of.

11 The Officiating Resident concurs in the remarks made by the Conservator regarding his subordinates, and with regard to Mr. Bagshawe himself desires to place on record his sense of the marked ability and singular tact which he has displayed from the time when he first took charge of his appointment. His deputation to Berar has been of utmost advantage to forest administration in the Province.

(By order),

G. H. TREVOR,

Secretary for Berar.

No. 174F., dated Fort William, the 21st February 1882.

From—A. MACKENZIE, Esq., C.S., Offg. Secretary to the Government of India, Home Department.

To—The Resident at Hyderabad.

I AM directed to acknowledge the receipt of the letters from your Secretary for Berar, No. 413, dated the 31st October, and No. 422, dated the 7th November last, forwarding the Annual Report of Forest Administration in the Hyderabad Assigned Districts for the year 1880-81, and your remarks thereon.

Area of forests.

2. The changes in the forest areas are as follow :—

Class of forest.	On the 1st April 1880.	On the 31st March 1881.	
	Area in square miles.	Area in square miles.	Percentage of forest area to area of province.
State Reserves	817	960	6·0
District Reserves	571	426	2·6
Total Reserves ..	1,388	1,386	8·6
Unreserved forests	2,977	2,870	17·9
Grand Total ...	4,365	4,256	26·5

The total area of reserves has undergone a slight alteration only, but considerable transfers from District to State reserves have taken place. The reduction in the area of the unreserved forests is explained by the increase of cultivation, which has caused a falling off in the total area under conservancy of 109 square miles.

The formation of the Amraoti Hills reserves, comprising an area of 49,847 acres, is a satisfactory feature of the past year's work. This subject was fully discussed in paragraphs 165 to 173 of Mr. Brandis' "Suggestions regarding Forest Administration in the Hyderabad Assigned Districts, 1878," and, in accordance with his proposals, 17,944 acres have been constituted a closed reserve, while 31,903 acres remain open to meet the immediate wants of the people. The formation of reserves like those on the Amraoti Hills, which are destined to provide permanent supplies of wood and fodder for the surrounding districts, is of the highest importance in all parts of India which are liable to suffer from periodical drought. The Governor General in Council trusts that early steps may be taken for the formation of similar reserves in other parts of Berar and of Central India generally.

Considering the peculiar climatic conditions of Berar, the proportion of reserves to the total area of the province is as yet very moderate, and it is hoped that the work of transferring additional areas to the classes of State and District reserves will be steadily proceeded with.

The demarcation of the reserves is well advanced, and endeavours should be made to complete it at an early date.

Protection from fire.

3. An attempt was made to protect an area of 564,672 acres from fire, and the efforts of the Department were so far successful that only 8,994 acres, equal to 1·6 per cent. of the total area, were burnt. These data show a considerable improvement as compared

with the results of the last few years, and it is hoped that complete success in this most important branch of forest conservancy may in time be secured. It is preferable to be absolutely successful over a small area than to extend operations over large tracts, a portion of which is burnt annually.

The Governor General in Council has noticed with special gratification that the people have commenced to appreciate the benefit to themselves of forest conservancy, and particularly of protection against fire; this result is no doubt largely due to a judicious working of the conservancy rules. The description of the result of fire protection on the Melghat reserves has been read with much interest. It affords an illustration of the great importance of uninterrupted protection, and it would appear that ten years' further protection will cause the ground to be so completely covered that extensive fires will become almost impossible.

Planting operations.

No. 652 F., dated the 9th October 1880

4. Favourable results from fire protection will no doubt, in many instances, obviate the necessity for planting operations. At the same time, as pointed out in the orders of the Government of India on the Report for 1879-80, there must be cases in which the forests are poor in the more valuable species, and where their introduction and extension by means of planting is indicated.

While the time of the staff is fully occupied with the demarcation of the reserves and in organizing their thorough protection against fire and otherwise, the Governor General in Council will not press this subject on the Resident, but ultimately planting operations must be resumed in order to give the forests a more advantageous mixture of species than in many instances they possess at present. Some of the plantations have been destroyed or injured by frost, but the areas artificially stocked in the Bairagarh reserve show that success can be obtained, provided the natural conditions of the localities to be planted are carefully studied, and arrangements made accordingly.

5. It is satisfactory to notice that a definite policy has now been adopted in the classification of the District forests. The work has, it is understood, been commenced by Mr. Bagshawe, Deputy Conservator of Forests, and if you consider that this officer should be retained in Berar until its completion, the Government of India will favourably consider any proposals you may desire to make in the matter.

In connection with this subject, I am desired to draw attention to the proposed organization of the Department in Berar, which is explained in paragraph 3 of the Report. The Conservator proposes to constitute four forest charges, but it is for consideration whether ultimately it would not be preferable to form each district into a separate forest charge, so as to connect forest administration more closely with the civil administration than has been practicable hitherto. This arrangement would require six District Forest Officers, while at present only four Deputy and Assistant Conservators are sanctioned. But as the charge of the Conservator is very small, and he can inspect every part of it at short intervals, it may be possible to post to the two least important districts Sub-Assistants, or even Forest Rangers, until further progress in the administration and an increase in the revenue will enable Government to provide two additional Assistant or Deputy Conservators.

6. The Report shows that the construction of roads continues to receive special attention. A judicious net-work of roads will bring the produce of the forests within the reach of the consumers. Improved communications will also favourably affect the revenue derived from the forests.

7. It has not been possible to record the quantities of forest produce removed from all the forests under conservancy. As far as the data available permit of conclusions being drawn, it appears there has been a considerable falling off in the extraction of timber, which has not been satisfactorily explained. It is noticed that the officers of the Department did all they could to alleviate the scarcity of fodder by supplies from the forests.

Yield and financial results.

The financial results of the year are as follow :—

	Receipts.	Charges.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
State Reserves	13,149	46,177	.....	33,028
District Reserves	35,664	22,438	13,226	.....
Unreserved Forests	2,17,743	60,354	1,57,389	.....
TOTAL ...	2,66,556	1,28,969	1,37,587	.....

The revenue has been derived from the following sources :—

	Rs.
By the sale of timber	71,107
Ditto firewood and charcoal	13,858
Ditto bamboos	21,544
Ditto grass and by grazing fees	1,41,430
From miscellaneous sources	18,617
TOTAL ...	2,66,556

As compared with previous years, the financial results of the year under review are not favourable :—

	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
1878-79	2,85,670	1,07,350	1,78,320
1879-80	3,07,501	1,10,514	1,96,987
1880-81	2,66,556	1,28,969	1,37,587

It will be observed that the revenue has fallen off, while the expediture has increased, and it is hoped that during the year 1881-82 an improvement may be effected in this respect.

8. In the orders on the Report for 1879-80 the absence of detailed reviews by the Commissioner and yourself was noticed with regret, and I am directed to point out that the same remark is called for this year. It has also been noticed that Forms Nos. 50 and 51, which are prescribed in the Forest Code, have been omitted.

On the whole, the Governor General in Council is satisfied that fair progress has been made during the year in the Forest administration of the Hyderabad Assigned Districts.

No. 175F.

COPY of the above, with a copy of the Report, forwarded to the Foreign Department for information.

No. 281 F., dated Simla, the 27th March 1883.

From—A. MACKENZIE, Esq., C.E., Secretary to the Government of India.

To—The Resident at Hyderabad.

I AM directed to acknowledge the receipt of the letters from your Secretary for Berar, Nos. 389 and 409 of the 5th and 30th October last, respectively, forwarding the Report of Forest Administration in the Hyderabad Assigned Districts for the year 1881-82, with your Review thereof.

2. The changes in the areas of the forest lands are exhibited in the following table:—

Area of forests.

Class of Forests.	Area of Forests, in square miles.	
	On 1st April 1881.	On the 31st March 1882.
State Reserves	960	1,086
District Reserves	426	308
Total Reserves ...	1,386	1,394
Unreserved State Forests	2,870	3,030
Grand Total ...	4,256	4,424

By a series of transfers the area of State reserves has been increased by 126 square miles, while that of the District reserves has been reduced by 118 square miles. The unreserved forests have been increased by the addition of grazing lands in the Basim District.

The Governor General in Council is glad to notice that the re-classification of the District forests is well advanced, and it is hoped that the work will be concluded at an early date. When this has been accomplished, the system of placing the District Forest Officers in charge of all forest and grass lands, in subordination to the Deputy Commissioners, and which has your entire concurrence, should be introduced. In the case of the Buldana and Akola Districts, it is for consideration whether the boundaries could not be altered so as to bring each reserve entirely either into the one or other of these districts.

3. The areas permanently set aside for the production of wood, grass, and other forest produce have hitherto been classified as State reserves, District reserves, Rhamnas, Babul bans, grazing grounds, &c. I am directed to suggest for your consideration whether it would not be best to put all such lands on the same legal footing by declaring them "reserves" under the proposed Regulation, and to classify them according to their purposes in the rules to be passed under the Regulation. If this plan should commend itself to you, it would once for all put a limit on the further alienation of land and the acquisition of new rights, while it would leave you at liberty to set aside any particular forest for the production of wood or grass as may be required from time to time.

Roads.

4. The progress made in the construction of roads in the Melghat forests is very satisfactory, and it is noticed that the demand for bamboos is rapidly increasing in consequence. It will be advisable to continue these works steadily, so as to open out as many parts of the forests as possible, otherwise the demand will be concentrated on a comparatively small portion of the total area, which will thus be exposed to the danger of being overworked.

5. The results of fire-protection, as compared with those of the previous year, are as follow :—

Fire-protection.

Year.	Area, in acres.		
	Attempted.	Failures.	Proportion of failures to area attempted, in per cent.
1880-81	564,672	8,994	2
1881-82	599,804	46,373	8

The results were less favourable in the year under review than they were in the previous year. It is noticed that four fires are said to have been caused by lightning, nine by incendiaries, and six by carelessness of the establishment employed on line-burning. It would appear that greater care and increased watchfulness are likely to reduce the number of fires of the last two classes in future.

It is noticed that the Conservator of Forests believes fire-conservancy to be followed by an enormous increase in insects. This is a very important matter, and the Government of India desire to be informed on what facts the assumption is based. As at present informed, His Excellency in Council understands that fire-protection, by establishing more favourable conditions for the growth of forest trees, is likely to reduce the danger from insects, rather than to increase it.

6. The number of prosecutions for breaches of the Forest Rules has risen from 340 in 1880-81 to 369 in 1881-82. The increase, as well as the total number, is small, and the figures show that the people of Berar do not feel the restrictions imposed in the interest of forest conservancy.

Breaches of the Forest Rules.

It is satisfactory to notice that dhya cultivation has been brought under complete control.

7. Nothing has been recorded under the head of sowing and planting. The Governor General in Council trusts that this subject may not be lost sight of. In the plains of Berar land is generally valuable; and if areas fit for cultivation are, nevertheless, set aside for the production of wood, they should be fully stocked as early as possible, so as to produce a complete crop.

Sowing and Planting.

8. The financial results of the year, as given in the Report, are as follow :—

Financial results.

Class of Forest.	Receipts.	Charges.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
State Reserves	24,075	65,543	...	41,468
District do.	8,573	29,983	...	21,410
Unreserved forests	2,01,167	56,167	1,45,000	...
Total ...	2,33,815	1,51,693	82,122	...

The above classification is that adopted by the Conservator of Forests. It appears, however, that the allotment to each class is of a very rough description; and, unless it is worked out in detail, the data are liable to mislead.

As regards the different sources from which the revenue has been derived, the figures for 1881-82 compare as follow with those of the previous year :—

Source of Revenue.	1880-81.	1881-82.
	Rs.	Rs.
By the sale of timber	71,107	63,004
Ditto firewood and charcoal	13,858	15,958
Ditto bamboos	21,544	17,264
Ditto grass and by grazing fees	1,41,430	1,19,083
From miscellaneous sources	18,617	18,506
Total ...	2,66,556	2,33,815

There has been a falling off in the sales of timber, bamboos, and grass and grazing. The latter is explained by a good harvest, and the falling off in the receipts from timber by the raising of the royalty on teak bullies, which has resulted in reduced cuttings. The reduction in the sales of bamboos has not been explained.

The charges have risen from Rs. 1,28,969 in 1880-81 to Rs. 1,51,693 in the year under review. Of the increase, Rs. 12,343 are under "A, Conservancy and Works," and Rs. 10,381 under 'B, Establishments."

The totals compare as follow with those of previous years :—

Year.	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
1878-79	2,85,670	1,07,350	1,78,320
1879-80	3,07,501	1,10,514	1,96,987
1880-81	2,66,556	1,28,969	1,37,587
1881-82	2,33,815	1,51,693	82,122

It will be observed that the balance sheet is becoming less favourable year after year, and I am directed to ask that a full explanation of this fact may be given in next year's Report.

9. It is noticed that you consider the results of the year on the whole somewhat disappointing, and in this view the Governor General in Council is constrained to agree. It appears to the Government of India that the re-classification of the District forests should now be pushed on as quickly as possible, and that early orders should be passed on all taluks in which the work has been completed, with the view of a final settlement of the areas to be maintained as wood, grass, and grazing lands. Until this has been done, a degree of uncertainty must exist, which is, no doubt, detrimental to the proper progress of forest administration.

No. 282.

Copy of the above, with a copy of the Report, forwarded to the Foreign Department for information.

Appendix showing the discrepancies noticed in the Statements appended to the Report of Forest Administration in the Hyderabad Assigned Districts for the year 1881-82.

FORM No. 50.

(*Plantations.*)

The total under "Cost during 1881-82" does not agree, as it should (*vide* paragraph 259 of the Forest Department Code), with the sum entered as the total of A. VIII.d. in Form No. 53.

FORM No. 53.

(*Summary of Revenue and Expenditure.*)

This form does not bear (as it should) the signature of the Comptroller Hyderabad.

"Prescribed" Forms Nos. 54 to 57, and Forms Nos. 58 to 61 and 63 to 65—which, though "suggested," are "required" (*vide* paragraph 256 of the Code)—do not accompany the Report.

Govt. Central Branch Press, Simla.—No. 2 H. D.—29-9-83.—274.

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No. 4618 of 1882.

From

A. P. HOWELL, Esq., C. S.,

Commissioner,

Hyderabad Assigned Districts,

To

The SECRETARY for BERAR to the RESIDENT,

Hyderabad.

Dated Amraoti, *the 12th September* 1882.

Sir,

I have the honour to forward the Forest Report for the Hyderabad Assigned Districts for 1881-82. I received the Report on the 20th ultimo, the date on which I temporarily left the province until the 7th instant, and this absence will, I hope, excuse the delay in submission. The main facts are briefly as follows:—

The total forest area is now 4,424 square miles. The principal alterations during the year were the transfer from the District reserves to the State reserves of 126 square miles, chiefly in the Wun District, and the addition of 260 square miles to the District unreserves. The State reserves are now nearly as large as they are likely to be. The demarcation of this area is now, it is said, almost complete.

Para. 3.—Forest charges.

2. In a short time each district will have its own forest officer, who will be as regards reserves under the Conservator, and as regards unreserved forest, under the Deputy Commissioner—an arrangement which, combined with the re-classification of the District forest, will conduce to the improved administration of unreserved forest of which they are much in need.

Para. 4.—Forest rules.

3. The new rules are now in circulation for the opinion of the district officers, and will, it is hoped, be sanctioned shortly.

Para. 6.—Fires.

4. The results for the year compare unfavourably with the previous year, which however, was exceptional, showing a percentage of 1·6 burnt against 8·5 in former years. This year the percentage burnt to area attempted to be protected is 7·9, and further extension should not be allowed until the area actually taken in hand is made quite safe. The details of the fires reported in paras. 14, 28, 34, 43, are not notable, except in the Ghatbori reserve, where three fires are ascribed to incendiaries. Incendiary fires being, as a rule, evidence of disaffection with forest administration, any increase in their number obviously requires careful notice and explanation of the cause and probable remedy. The large amount of grass which (para. 28) was burnt in the Amraoti District is much to be regretted, and shows a mistake in the administration of the ramnas, that so large a proportion of the grass should be allowed to get dry without being used. I am told that under the new scheme the demand in Amraoti for hay was altogether miscalculated, and it is to be hoped that the attempt (mentioned in para. 28) will be more successful; if not, the area of ramnas allowed to be grazed should be increased, as it is of course bad economy to allow a large quantity of good grass to be burnt. The remarks of the Deputy Commissioner, Amraoti, recording the experience of the year on this subject, deserve attention. The object in view is of course to make it the direct interest of the people in the neighbourhood to prevent fires as injurious to themselves.

Paras. 9, 10 and 11.—Yield and working.

5. These paras. exhibit the general financial results of the year, which can only be considered as unfavourable. The State and District reserves both show a considerable

deficit, and practically the department is paid for by the unreserved forest, that is, omitting those of Melghat, the unoccupied land, the grazing dues of which are collected by the tahsildars and handed over to the Forest Department. This question of the increase of the forest income was noticed by the Government of India last year,* and the further fall this year will no doubt attract attention. I am under the impression that having regard to forest area and financial results, Berar is somewhat over officered as compared with other provinces, and the annexed comparison with the Central Provinces seems to confirm this view:—

* Para 7, Review.

	Total forest area.	Establishment charges.	Total.	
			Receipts.	Expenditure.
	Sq. m.	Rs.	Rs.	Rs.
Central Provinces...	19,666	33,467	8,50,139	4,95,513
Berar...	4,424	26,981	2,33,815	1,51,693

The subject seems important with reference to paras. 16, 24, and 59 of the Report. Hitherto the department has relied for its income on the unreserved forests of the Melghat Division, but these are becoming exhausted (*vide* para. 66, clause (d), of last year's Report). The Department now will have to rely on the reserves, and it remains to be seen how these will answer; but para. 24 does not give a promising account of the first attempts to find a market for their produce. The Conservator seems to look forward to the Betul forest being exhausted; but if good roads could be made through the Melghat to Burhanpur on the west, and to Betul and Itarsi Hoshangabad on the north, fresh markets would be opened up. This might be arranged with the Central Provinces Administration in connection with the Ellichpur-Pili road, and the junction of the two branches of the Great Indian Peninsula Railway would be profitable to both provinces, and especially to Berar. In this connection the forest road made by Mr. Ballantyne (para. 20) seems to be good and cheap. The extension of the road from Bandam towards Dhamangaon would seem to be an urgent work.

Para. 23.—Survey of Bairagarh Reserve.

6. I have already referred for the Resident's orders the proposal for the survey of the Melghat.

Para. 59.—Yield and working.

7. The large falling-off of the income from bamboos is unsatisfactory and unexplained, and the alteration in the tax on bullies calls for notice. This subject was treated in para. 65 of the last year's Report, and I think a special report should be called for on the subject with Mr. Bagshawe's views, as the tax was altered on his recommendation.

General remarks.

8. The question of the classification of the District forests has not progressed very far, and the whole system of their administration is now pending their re-classification. There is a considerable quantity of babul wood growing in scattered blocks throughout the valley. These blocks were intended to supply firewood to the people, but this has never been done, owing to a want of system in cutting down and disposing of the wood. Next year's Report too will, I hope, show some progress and success in the measures (referred to in para. 7 of the Resident's last Review) designed to increase the water-supply in those localities which are most resorted to for cattle grazing when the ordinary supplies fail.

I have the honour to be,

Sir,

Your most obedient Servant,

A. P. HOWELL,

Commissioner, Hyderabad Assigned Districts.

No. 242 of 1882-83.

From

A. T. DRYSDALE, Esquire,

Conservator of Forests,

Hyderabad Assigned Districts,

To

The COMMISSIONER,

Hyderabad Assigned Districts.

Dated Amraoti, 20*th July* 1882.

Sir,

I have the honour to submit the Progress Report of Forest Administration in the Hyderabad Assigned Districts for the year 1881-82.

CHAPTER I.—General Summary.

1.—*Area and Boundaries.*

Forest area of the province.

1. The following statement shows the changes that have taken place during the year in the classification of the forest area of the province:—

Description of forest.	Area in square miles.				Percentage of forest area to area of province.	
	On 1st April 1881.	Added during the year exclusive of inter-divisional transfers.	Excluded and transferred during the year exclusive of inter-divisional transfers.	On 31st March 1882.	On 31st March 1881.	On 31st March 1882.
State Reserves	960	126	...	1,086	6·0	6·7
District do.	426	8	126	308	2·6	1·9
Do. Unreserves	2,870	260	100	3,030	17·9	18·8
Total ...	4,256	394	226	4,424	26·5	27·5

The increase in State Reserves is owing to the transfer of the undermentioned District Reserves:—

Reserve.	District.	Area.
		Sq. m.
Pimpri Dhangar ...	Akola	8
Loni ...	do.	1
Bhongaon ...	do.	2
Rui ...	Basim	10
Goudwakri ...	Wun	26
Korad ...	do.	25
Patroat ...	do.	6
Anjankhed ...	do.	12
Lonbehel ...	do. ..	16
Small teak tracts at		
Mangla ...		Acres.
Renkapur ...		
Dapura	do.	153
Jalgaon ...		
Aurangpur ...		Sq. m.
Phiski ...	do.	4
Tiwsala ...	do.	6
Bhiokund ...	do.	5
Krishnapur ...	do.	6

The District Reserves have been reduced by the above transfers, but have gained eight square miles by the addition of some permanent grass-lands (ramnas) hitherto shown in the unreserved area. The Unreserved Forests have been increased by 160 square miles, owing to the inclusion within them of a large area of free grazing land that had in former years been omitted from the returns.

Compared with last year the percentage of the different classes of forest to the area of the province exhibits an increase of ·7 in State Reserves, a decrease of ·7 in District Reserves, and an increase of ·9 in Unreserved Forests.

It is improbable that a further addition to any great extent will still be made to the area of State Reserves, as the principal District Reserves have already been transferred, and the greater portion of the remaining area will be dealt with in the re-classification of the Unreserved Forests now in progress.

Boundary lines and marks.

2. The additional reserves taken up have been demarcated, with the exception of Gondwakri and Korad in the Wun District, which will be completed next cold weather. The boundary lines and pillars of former reserves have been kept in good order.

Distribution of the forest area into forest charges.

3. No changes have been made in the limits of divisional charges, which still continue three in number, *viz.*:—Melghat (Ellichpur), South Berar, and Wun.

It has been decided that any future changes that may be made will be with a view to connecting forest administration more closely with the civil administration. Forest charges will become conterminous with districts, the forest officer having charge of all the reserves in his division directly under the Conservator, and being in addition Assistant to the Deputy Commissioner in the work of the Unreserved Forests. With this object in view, proposals have lately been submitted for forming the Amraoti District into a forest division under charge of the Sub-Assistant Conservator now attached to the Melghat Division, and on the appointment of an additional officer to the province, the Basim District will also be made a forest division. The South Berar Division will then be the only charge containing two districts, *viz.*, Buldana and Akola, and at present I do not see my way clearly to sub-dividing it, as most of the reserves of the division are situated partly in one district and partly in another, few being comprised solely in one district.

2.—*Protection and Improvement.*

New forest rules.

4. The Forest Rules of 1871 still remain in force. The Resident, in reviewing the report for 1880-81, remarked that Mr. Baden Powell objected to the extension of the Indian Forest Act VII. of 1878 to Berar, and instead had himself offered to draw up a set of rules for the province. I am not aware whether any further action has been taken in the matter. New rules are much required, and the ones that have been prepared in anticipation of the Act being applied would be a considerable improvement on those now in force.

Prosecutions for breaches of forest rules.

5. The subjoined statement exhibits the prosecutions made under the forest rules:—

	1880-81.		1881-82.	
	Cases.	Convictions.	Cases.	Convictions.
State Reserves	27 ...	22 ...	85 ...	29
Unreserved Forests included in Forest Divisions	161 ...	187 ...	132 ...	110
District Forests	152 ...	121 ...	202 ...	170
Total ...	340 ...	280 ...	369 ...	309

The figures call for no remark. Whilst there has been a small increase of 29 in the number of cases, the percentage of convictions remains about the same.

Protection of reserves from fire.

6. The following is a comparative statement of the areas protected from fire :—

	Area of reserves attempted to be protected in 1881.	Area of reserves actually protected in 1881.	Area of reserves attempted to be protected in 1882.	Area of reserves actually protected in 1882.
Melghat Division	389,649	389,045	389,649	379,[illegible]19
Amraoti Range	9,408	9,008	17,944	16,676
South Berar Division	133,965	129,409	95,517	91,369
Wun Division	31,650	28,216	96,194	68,637
Total ...	564,672	555,678	599,304	552,931

The results are unfavourable to the year under report. Whilst the area attempted to be protected in 1882 was greater by 34,632 acres than it was in 1881, the area actually protected was less by 2,747 acres. The cost of fire protection, too, was Rs. 1,542 more in 1882 than in 1881.

These results have been brought about by an extensive fire in the Bairagarh Reserve of the Melghat Division, and by unsuccessful conservancy in the Kelapur Reserve of the Wun Division.

Creeper cutting in the Melghat Division

7. Creeper cutting is only necessary in the Melghat Division, where compartments Nos. 11, 25 and 30 (aggregate area 33 square miles) of the Bairagarh Reserve, and about 12 square miles of the Gugamal Reserve have been cleared.

Construction of roads.

8. The roads in the Melghat under construction by the Public Works Department have been completed. Their total length is 46 miles. 28 miles of new roads have also been opened out by the Forest Department.

3.—*Yield and Working.*

Yield of the Berar forests in general.

9. The yield of the State Reserves and Unreserves directly under Forest Officers is given in Appendix E.

The District Reserves and Unreserves in charge of civil officers are being re-classified. For this reason, and also because most of the produce of the unreserves is exported free of duty, it is not possible to ascertain their yield.

4.—*Financial Results.*

Financial results.

10. The following statement exhibits the financial results of the year :—

		Revenue.	Expenditure.	Surplus	Deficit.
		Rs.	Rs.	Rs.	Rs.
Direction Office.	Direction	26	25,961	...	25,935
	District Reserved Forests ..	8,507	4,549	3,958	...
	Do. Unreserved Forests ...	1,18,436	20,131	98,305	...
	Amraoti Range State Forests ...	9,597	2,785	6,812	...
Melghat Division.	Divisional Office	...	33,304	...	33,304
	State Reserves	11,517	21,052	...	9,535
	Unreserved Forests	82,666	10,602	72,064	..
South Berar Division.	Divisional Office	171	10,119	...	9,948
	State Reserves	969	9,502	...	8,533
Wun Division.	Divisional Office	...	6,918	...	6,918
	State Reserves	1,926	6,770	...	4,844
	Total ..	2,33,815	1,51,693	1,81,139	99,017
	Deduct deficit ..			99,017	
	Net Surplus ..			82,122	

If the receipts and charges of the Direction and Divisional offices be equally divided among them, the revenue and expenditure of the different classes of forest stand thus :—

Class of Forest.	Revenue.		Expenditure.		Surplus.		Deficit	
	1880-81.	1881-82.	1880-81.	1881-82.	1880-81	1881-82.	1880-81.	1881-82.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
State Reserves ...	13,149	24,075	46,184	65,543	...	...	33,035	41,468
District Reserves..	35,664	8,573	22,445	29,983	13,219	...	...	21,410
Unreserved Forests.	2,17,743	2,01,167	60,340	56,167	1,57,403	1,45,000	...	...
Total ...	2,66,556	2,33,815	1,28,969	1,51,693	1,70,622	1,45,000	33,035	62,878
				Deduct deficit ...	33,035	62,878		
				Net results ...	1,37,587	82,122		

The fall in revenue is accounted for by a decrease of—

	Rs.	
	22,347	in the receipts from sale of grass in Unreserved Forests.
	11,845	do. do. timber do.
	4,313	do. do. bamboos do.
Total ...	38,505	

Against which has to be set an increase of—

	Rs.	
	3,082	from sale of timber in State Reserves.
	2,099	do. firewood and charcoal in Unreserved Forests.
Total ...	5,181	

The increase in expenditure according to main heads is :—

	Rs.
Working charges A.	12,344
Establishments B.	10,380
Total ...	22,724

The principal items of increase under working charges are :—

	Rs.
Payments to village officers for collection of forest dues	2,655
Purchase of elephant	3,000
Compensation for land taken into reserves ...	4,036
Roads in Melghat	1,239
Surveys do.	1,409
Total ...	12,339

Whilst those under establishments comprise additional pay of :—

	Rs.
Conservator	1,263
Pay of Mr. Bagshawe, Deputy Conservator, on special duty	3,287
Additional subordinate and office establishments ...	3,436
Travelling allowances and contingencies	2,586
Total ...	10,572

With a view to increasing the revenue of the Department, proposals were made in my letter No. 1039, dated 14th March 1882, for taxing head loads of fuel and grass exported from the Melghat, and for assimilating the grazing dues in the Melghat and in the Wun District to those obtaining in the Amraoti Hills,

Transactions of the year exhibited under main heads of revenue and expenditure.

11. The receipts and charges of the year are exhibited under main budget heads in the subjoined statement:—

Heads.	Receipts.		Charges.	
		Rs.		Rs.
I. Departmental timber operations	I.	3,629	I.	284
II. Other revenue ...	II., III., & V.,	2,30,186	II., III., V., IX., 75 per cent. VI. and B.	1,04,337
III. Formation, protection, and improvement of forests	...	...	VII., VIII., 25 per cent. VI. and B.	47,072
	Total ...	2,33,815	Total	1,51,693

CHAPTER II.—Reserved Forests.

(a).—DEMARCATED STATE FORESTS.

A.—Melghat Division.

1.—*Area and Boundaries.*

Demarcation work.

12. The reserves of the Melghat Division remain the same as last year, and the only demarcation work that has been done consists in the numbering of the 142 pillars round the Gugamal Reserve at a cost of Rs. 15, and in the erection of 181 pillars on the boundaries of the nine permanent black-soil villages in the Bairagarh Reserve at a cost of Rs. 271.

The demarcation of the Jiri Reserve has still to be commenced. Final proposals on the subject of this forest have lately been submitted. In consequence of the impossibility of resuming the rights existing in the western portion of the Reserve without inflicting much hardship on the surrounding population, it has been suggested that this part should be abandoned, and the area to the east of the Ban river alone retained. This would leave the area of the reserve at about 10 square miles.

2.—*Protection and Improvement.*

Prosecutions for breaches of Forest Rules.

13. Only five cases occurred, in all of which convictions were obtained. The offences committed were kindling fires or unauthorised felling of forest produce.

Fire protection.

14. The following statement shows the areas protected:—

Reserve.	Protected.		Increase.	Decrease.
	1881.	1882.		
Bairagarh	271,688	262,049	...	9,639
Gugamal	114,957	114,800	...	157
Chikalda	2,400	2,400	...	...
Total ...	389,045	379,249	...	9,796

Compared with last year there is a decrease in area protected of 9,796 acres, whilst the total expenditure on fire conservancy has increased by Rs. 533. The occurrence of fires naturally adds to the cost of protection. Three fires broke out, in the Bairagarh Reserve, one at Kekda on the 16th March, another at Patia on the same date, and the third at Jarida on the 12th April. All three, it is believed, were caused by lightning.

The only extensive fire was that at Kekda, which spread over an area of about 15 square miles.

It was discovered early in the morning, but being in a very thinly populated part of the reserve had spread over a considerable area before sufficient men arrived to contend with it. A strong wind sprang up during the day, carrying the flames over the ordinary barriers, and the fire was not extinguished till the morning of the 17th.

The area burnt consists chiefly of open grass lands, which had been formerly under cultivation.

The other two fires were discovered by villagers in the immediate vicinity of the reserve, and extinguished at once. The areas burnt were very small, and hardly worth recording.

Only one fire occurred in the Gugamal Reserve, burning about 157 acres. It originated from carelessness on the part of a bamboo cutter.

Continued good feeling between Forest Department and inhabitants of the Melghat.

15. The following extract from a letter from the Deputy Commissioner, Ellichpur, testifies to the continued good feeling existing between the Forest Department and the inhabitants of the Melghat:—

"I would desire, with reference to the Melghat, to acknowledge continued good service at the hands of Rangers Ahmed Ali and Narain Dhondo, and to observe that our relations with the hill people are most excellent. You will recollect that I had occasion to bring to your notice for reward and commendation the good service done by the inhabitants of Jaridah, who, when a portion of the Bairagarh Reserve in the vicinity of their village was fired by lightning, turned out and had the fire under control and almost out before any forest official arrived on the scene. Their promptitude saved Government from considerable loss. That our arrangements for enlisting the interests of these people continue to work admirably I have had within the last few days most signal proof in a request from the villagers of Baroja, Keysarpur, and Chikhli, quite without the Reserves, to be enrolled amongst the privileged villages on the score that they frequently supply cattle for dragging wood and for other forest work. I need hardly say that these happy relations and the successful results that come therefrom are largely due to the tact and discretion with which Mr. Ballantyne works his important charge."

Results of fire protection.

16. Hitherto the beneficial effects of fire conservancy, such as the creation of a forest soil, increased re-production, diminution in the rank growth of grass, &c., have annually been recorded, but I now have to bring to notice an evil which is making itself felt more and more every year, *viz.*, the enormous increase in insects, some troublesome only to man and animals, others injurious to vegetation. Among the latter may be mentioned a caterpillar which, in the first break in the rains, especially if it is a long one, attacks the teak tree in swarms, leaving it almost bare of foliage, and thus checking its growth to a serious extent. Teak seedlings, too, suffer great injury from an insect which buries its eggs in the latest growth. On the production of the larvæ large excrescences are raised, and the leading shoots ultimately killed. How far this insect will affect the future of the trees remains still to be seen.

The "borer" too is becoming much more plentiful than formerly.

17. No additions have been made to the plantation in the Melghat, the expenditure of Rs. 281 shown in Form No. 50 having been incurred in the maintenance of the Forest garden at Kolkaz, and of existing plantations.

Creeper cutting

18. Creepers have been cut in compartments Nos. 11, 25, and 30 (aggregate area 33 square miles) of the Bairagarh Reserve, and over an area of about 12 square miles of the Gugamal Reserve, at a cost of Rs. 200.

Roads constructed by Public Works Department.

19. The Ellichpur-Pili road is now open to traffic throughout its entire length of 32½ miles. The estimated cost of this road was Rs. 3,22,998 and up to end of June 1882,

Rs. 3,23,557 have been expended. The Executive Engineer informs me that an outlay of about Rs. 3,000 will still be incurred before all the work connected with the road is completed.

The branch road from Gattang to Chikalda, length 13½ miles, estimate Rs. 17,495, has been finished at a cost of Rs. 17,625.

The completion of the Ellichpur-Pili Road has already resulted in a large increase in the export of bamboos, and it is expected that the trade in this article of forest produce will become brisker every year.

During the hot weather months bamboos could not be cut quickly enough to fill the large number of carts that were brought into the reserve, whilst the Kurkus, who are the cutters, were enabled to obtain on their own ground as high rates as they used in former years to get at the nakas after a journey of between 30 and 40 miles.

Roads constructed by Forest Department.

20. The following progress has been made in the construction of roads by the Forest Department to act as feeders to the main lines.

Bairagarh Reserve.

The Raipur road has been extended four miles at a cost of Rs. 538, the steepest gradient being 1 in 20. The road is now completed to within two miles of Hatru, and next season it will probably be extended as far as Biba in the north-east corner of the reserve.

A six-feet wide road has been made from Sembadoh to Mangia Deo, a distance of four miles, at a cost of Rs. 601. This road will be widened to 13 feet in the rainy season, and will ultimately be extended to Jaridah *via* Makhla, Bodna, Kandukera, and Awagar.

Repairs costing Rs. 1,252 have been made to the portion of the Raipur Road, constructed in former years.

Gugamal Reserve.

The Chikalda-Katida road has been extended to Bandam *via* Rangraò, Churni, Koilari, Karko, Sailu and Dakna, a distance of 20 miles, at a cost of Rs. 6,967.

To make this road of any real value, and to cause it to effectually tap the Gugamal Reserve in the same way as the Ellichpur-Pili Road does the Bairagarh Reserve, it will be necessary to construct a road from Chikalda to Dumangaon, a distance of 14 miles. I have already recommended in my letter to your address, No. 89, dated 10th May 1882, that this road should be made by the Public Works Department. Direct cart traffic would then be opened up between Ellichpur and the Nimar District of the Central Provinces, for carts can already be brought as far as Bandam.

Buildings

21. Rest-houses and thanas have been repaired and kept in good order at an expenditure of Rs. 403.

Rights in Bairagarh and Gugamal Reserves

22. The number of villages in the Bairagarh Reserve has been reduced to 24, the inhabitants of two villages having moved into the permanent black-soil villages.

No change has taken place in the villages in the Gugamal Reserve, which still remain seven in number.

The following have been selected as permanent black-soil villages in this reserve, and their demarcation will be undertaken next season :—

1. Bandam, Dakna, and parts of Kuparkera and Para to form one large village like that of Borda in the Bairagarh Reserve.
2. Arao.
3. Chiladari.

In the above villages will be included the best culturable land in the reserve, and almost the entire area at present under cultivation.

Survey work in the Bairagarh Reserve

23. The topographical survey, on the scale of 4 inches=1 mile of the following black-soil villages in the Bairagarh Reserve has been completed:—

1. Butram.	4. Hatru.
2. Ruipatar.	5. Raipur
3. Borda	

The survey of Rangobeh and Chowrakund is nearly finished, whilst that of Karimal and Harisal has yet to be commenced.

The northern and western boundaries of the reserve have also been surveyed, as well as about 15 miles of the Raipur cart-road. The total area topographically surveyed is about 50 square miles.

The above work has been carried out by the survey branch of the Forest Department, and has brought to light numerous errors in existing maps. For this reason, as well as owing to the smallness of the scale of the present maps, it is to be hoped that the proposals for a fresh survey of the entire taluk made in joint memorandum, dated 20th April 1882, by the Deputy Commissioner, Ellichpur, the Deputy Superintendent, Forest Surveys, and myself may be sanctioned.

3.—*Yield and Working.*

Yield of the Bairagarh and Gugamal Reserves.

24. In the Bairagarh Reserve the plan adopted in former years of cutting over badly grown teak trees level with the ground with a view to securing healthy coppice shoots from the stools has again been commenced. Altogether 894 such trees have been felled in compartment No. 11. It was expected that there would have been a good demand for the wood in the plains of Berar, but, curious to relate, almost the whole of it was exported to Barhanpur and Khandwah in the Nimar District of the Central Provinces. The small quantity that was taken to Ellichpur had to be sold at a loss. It is said that large quantities of teak are being imported into Berar *via* Kumai from Malguzari lands in the Betul District, and that our wood cannot compete with it, owing to the low rates at which it is obtained.

An attempt has also been made to find a sale for wood of other kinds than teak, such as Haldu (*adina cordifolia*), Sadra (*terminalia tomentosa*,) Dowra (*anogeissus latifolia*), &c., but with little or no success.

It is useless to commence a regular system of fellings in the Bairagarh Reserve until there is a constant demand for the wood, and this apparently will not be until the Malguzari forests of the Betul District are exhausted.

The number of bamboos exported was:—

	1880-81.	1881-82.
Bairagarh	480,220 ...	444,350
Gugamal	76,380 ...	173,300
	556,600 ...	617,650

A considerable increase in the export of bamboos may be expected next year in consequence of the completion of the Ellichpur-Pili Road.

4.—*Financial Results.*

Financial results.

25. The following statement exhibits the

revenue and expenditure of the Melghat Reserves:—

Budget-heads.	Bairagarh.		Gugamal and Chikalda.		Total.	
	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.
	Rs.	Rs.	Rs.	Rs	Rs.	Rs.
Receipts—						
I. Timber, &c., removed by Government.	512	3,629	...	...	512	3,629
II. Do., do. by purchasers	7,355	6,089	763	1,738	8,118	7,827
III. Confiscated and waif wood ...	16	.	4	...	20	
V. Miscellaneous	83	60	..	1	83	61
Total ...	7,966	9,778	767	1,739	8,733	11,517
Expenditure—						
Working charges A.	7,534	6,346	4,027	7,955	11,561	14,301
Establishment B.	4,485	4,283	3,370	2,468	7,855	6,751
Total ...	12,019	10,629	7,397	10,423	19,416	21,052

The receipts and charges of the divisional office were:—

	1880-81. Rs.		1881-82. Rs.
Receipts	172	...	...
Expenditure on			
Works A.	1,912	...	18,460
Establishment and Contingencies ...	10,012	...	14,844
	11,924	...	33,304

The increase under A. is due to the compensation of Rs. 17,119 annually paid to the Melghat Rajas having been shown under expenditure of divisional office instead of under that of the Melghat Unreserved Forests as has been hitherto done, while the increase under B. is owing to additional office establishment having been entertained, and to the transfer of Sub-Assistant Conservator Mr. Rasul Khan to the Melghat Division.

B.—Amraoti Range.

1.—*Area and Boundaries.*

Demarcation.

26. The Amraoti Range continues to be administered by the Conservator, and is still shown separately, as proposals have been submitted for forming the district in which it is situated into a forest division. The demarcation of the different classes of reserve of which the range is comprised has been completed at a cost of Rs. 133

In my letter No. 867 of 13th January 1882, I made proposals for raising the area of the Chirbree closed block from 5,052 acres to 8,018 acres, and adding the Bhiwapur block to the open reserve This alteration would involve a decrease in the closed area of 1,390 acres, but, on the other hand, the department would benefit by having only one closed block instead of two, and by thus having work concentrated

The land round Chiroree is infinitely better adapted as regards soil, forest, growth, and proximity to Amraoti for a forest reserve than that near Bhiwapur, and it would be possible in a few years by exchanges of land to make the area of the one block equal to that of the present two combined.

2.—*Protection and Improvement.*

Prosecutions for breaches of the forest rules.

27. Fifteen prosecutions were made, in 13 of which convictions were obtained. The offences committed were either evading payment of dues or grazing without permission in closed tracts.

28. An attempt was made to protect the two closed blocks of Chirorce and Bhiwapur as well as the ramna block Success was obtained in the closed blocks, but about half of the ramna lands were burnt The expenditure amounted to Rs. 756. This includes cost of burning paths and extinguishing fires as well as the pay of special watchers.

Fire protection.

3.—*Yield and working.*

29. The system on which the Amraoti Range is worked was described in para. 39 of the Report for 1880-81, and a statement of the yield is given in Appendix E., to which is attached a return, Appendix F., showing the number of cattle grazed in the open reserve

Yield and working

In consequence of the needlessly large area of the ramnas for present requirements in the matter of grass, and the extensive area burnt during the year, I have made the following modifications in the plan of working this tract. Grass cutting will be permitted all the year round Grazing will be allowed during the cold weather months in the lowlying lands at the foot of the ramnas on passes issued at double the rates obtaining in the open reserve, the plateau lands or ramnas pure being alone retained for the supply of grass In the hot weather grazing on the usual terms will be permitted to the villages of which the ramnas form a portion.

Under this plan of working, it is hoped that fire conservancy may be more successful next year.

4.—*Financial Results.*

30 The receipts and charges of the range were as follows:—

Financial results.

			Rs
Receipts ...	...	...	9,597
Working charges A.	...	...	1,086
Establishment charges B.	...	...	1,699
		Total	2,785

No comparison can be made with the figures of last year, as the range was only formed in January 1881

(C)—South Berar Divison.

1.—*Area and Boundaries.*

31 The Kinwat Reserve, with an area of 52,558 acres, has been transferred to the Wun Division, whilst the following additional reserves have been taken up:—

Changes in area

Reserve	District.		Area. Acres
Pimpri Dhangar ..	Akola	...	5,233
Lom ...	Do.	...	911
Bhangaon ...	Do.	...	1,368
Rui ...	Basim	...	6,578
		Total ...	14,190

The area of reserves in the South Berar Division is now 95,517, compared with 133,885 in 1880-81.

32. The additional reserves shown in the preceding para. have been demarcated at a cost of Rs. 173, whilst the boundary lines and pillars of former reserves have been repaired at an expenditure of Rs. 348

Demarcation.

2.—*Protection and Improvement.*

33 Eight prosecutions, implicating 19 persons, were instituted for breaches of the Forest Rules. The offences committed were of a trivial nature. It is satisfactory to note that the difficulty experienced in former years from cattle grazing in the Garumatergaon and Ghatbori Reserves is gradually decreasing.

Prosecutions for breaches of the Forest Rules

The number of cattle pounded in these Reserves was 1,117, compared with 2,359 in 1880-81.

Fire protection

34. The following is a comparative statement of the areas protected from fire:—

Reserve.	Protected. 1881.	Protected. 1882.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
Gerumatergaon	44,692	44,142	...	550
Ghatbori	22,840	21,720		1,120
Penganga	10,125	11,575	1,450	.
Loni and Bhongaon	...	2,279	2,279	...
Pimpri Dhangar	.	5,233	5,233	...
Rui		6,420	6,420	..
	77,657	91,369	15,382	1,670
Less decrease			1,670	
Net increase ...			13,712	

During the year there has been an increased area protected of 13,712 acres at an additional expenditure of Rs. 152.

Four fires occurred in the Gerumatergaon Reserve, burning altogether 1,850 acres Two of the fires originated in line burning, one crossed the boundary before it had been thoroughly fire traced, and the fourth is supposed to have been caused by lightning.

In the Ghatbori Reserve five fires broke out, burning in the aggregate 2,040 acres Two of the fires originated in line burning, and three are ascribed to incendiaries It was at one time feared that there was going to be a repetition of the incendiary fires of former years, and that such was not the case is due, in a great measure to the prompt and active assistance rendered by the Deputy Commissioners of Buldana and Basim.

No fires occurred in the Penganga, Loni, and Bhongaon Reserves.

A small fire broke out in the Pimpri Dhangar Reserve before it had been fire traced, burning about 100 acres. The origin of this fire could not be discovered.

In the Rui Reserve two fires occurred—one accidentally caused by a traveller, and the other due to the carelessness of a guard. The area burnt was 158 acres.

Reproduction of anjan in the Gerumatergaon Reserve.

35. In the Gerumatergaon Reserve there is always a profusion of anjan (*hardwickia binata*) seedlings in the monsoon and winter months, but most of them disappear in the hot weather. With a view to ascertaining the proportion that survives, I had several small plots selected in different localities, some on plateaux, others in valleys and on the sides of hills, and the number of plants in each counted. Mr. Prevost has been unable to furnish me with a detailed statement of the results in time to be incorporated in this Report. He remarks, however, that the greater number of the plants shed their leaves in the hot weather, and were apparently dead, but on examination of the roots they were found to be still alive, and on the first fall of rain in May large numbers threw out fresh leaves.

The anjan seedling would therefore appear to have the same peculiarity as the teak, in that the stem dies down every year until the root has sufficient strength to throw up a shoot vigorous enough to withstand the hot weather.

Repairs to roads.

36. The main roads through the Ghatbori, Penganga, and Loni Reserves have been widened and improved at a cost of Rs. 125.

Buildings.

37. Three new thanas have been erected, and two repaired at an expenditure of Rs. 135.

3.—*Yield and working.*

Yield and working.

38. The Kinwat Reserve, from which bamboos have hitherto been derived, having been transferred to the Wun Division, the only article of export has been grass. The quantity disposed of during the past two years was—

1880-81. lbs.	1881-82. lbs.
17,272,395	3,772,140

The large decrease of 13,499,955 lbs. in the year under report was owing to a plentiful jowari crop and to the general abundance of grass outside the Reserves. Now that fire conservancy may be considered as somewhat established, effort will be made during the ensuing year to dispose of all dead and fallen wood in the reserves, and so to increase the revenue. But it will, I fear, be many years before the receipts from the reserves of this division equal the expenditure.

4.—*Financial Results.*

Financial results.

39. The financial results are exhibited below :—

Budget Heads	Gerumatergaon.		Ghatbori.		Penganga.		Pimpri Dhangar		Loni and Bhongaon.		Rui.		Total.	
	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.
Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Timber, &c., removed by Government.	...	...	..	..	...	..	...	..	...	..	..	...	...	...
II.— Do. by purchasers.	2,552	197	1,238	468	121	205	...	...	...	79	...	1	3,911	963
III.—Confiscated and waif wood ...	...	3	...	...	...	.	...	...	...	...	...	...	...	3
V —Miscellaneous ..	..	...	4	3	...	...	...	...	...	.	...	...	4	3
Total	2,552	200	1,242	471	121	205	...	...	...	79	...	14	3,915	969
Expenditure.														
Works A.	753	726	595	694	301	361	.	716	.	2,616	...	795	1,649	5,908
Establishment B. ...	1,327	1,389	1,287	1,174	694	666	..	67	.	271	...	27	3,308	3,594
Total ..	2,080	2,115	1,882	1,868	995	1,027	...	783	...	2,887	...	822	4,957	9,502

The increase in expenditure A. is due to a payment of Rs. 3,811 for occupied land resumed in the formation of additional reserves, and to the extra cost of demarcation. The receipts and charges of the divisional office were :—

	1880-81. Rs.	1881-82. Rs.
Receipts	263 ...	171
Working charges A.	1,092 ..	865
Establishment charges B. ...	9,063 ...	9,254
Total ...	10,155 ...	10,119

D.—Wun Division.

1.—*Area and Boundaries.*

Changes in area.

40. The area of reserves has been increased from 40,747 acres to 159,650 acres by the transfer

of the Kinwat Reserve from the South Berar Division, and the taking up of the following additional reserves:—

Reserve.	Area. Acres.
Gondwakri	16,347
Korad ...	16,117
Patroat	2,889
Anjankhed	7,579
Lonbehel	9,956
Teak tracts at Mangla, Renkapur, Dapura, Jalgaon, Aurangpur	153
Phiski	2,342
Tiwsala	3,596
Bhokund	3,433
Krishnapur	3,933
Total ...	66,345

The Kinwat Reserve, which has an area of 52,558 acres, is in the Basim District, and will ultimately be transferred to the Basim Division on its formation. The other reserves are all situated in the Wun District.

Demarcation.

41. With the exception of Gondwakri and Korad all the additional reserves have been demarcated.

146½ miles of boundary line have been cut and 59 boundary pillars erected at a cost of Rs. 951.

Where necessary the boundary lines of former reserves have been cleared and repairs made to the pillars.

2.—*Protection and Improvement.*

Prosecutions for breaches of the forest rules.

42. Seven prosecutions were instituted for breaches of the Forest Rules, in five of which convictions were obtained. Fines were inflicted in all cases, the total amounting to Rs. 100.

Fire protection.

43. Subjoined is a statement of the areas protected from fire:—

Reserve.	Protected. 1881.	Protected. 1882.	Increase.	Decrease.
Kinwat	51,752	51,918	166	...
Kelapur	28,216	14,080	...	14,136
Patroat	.	2,639	2,639	...
	79,968	68,637	2,805	14,136
			Less increase ...	2,805
			Net decrease ...	11,331

Only one fire occurred in the Kinwat Reserve burning 640 acres. It was supposed to have been accidentally kindled by people from the Nizam's territory.

There were ten fires altogether in the Kelapur Reserve, of which six are said to have been wilfully kindled; two were due to accidents in line burning, and two spread from the unreserved forests.

The Assistant Conservator complains of having met with considerable opposition in fire conservancy from the inhabitants of the villages surrounding the Kelapur Reserve. He could not procure labour in sufficient quantity for line burn-

ing, nor would the people render prompt assistance on the outbreak of fires. I purpose making a personal inquiry into this matter on the spot next marching season.

In Patroat there was but one fire, and its origin could not be discovered. It burnt 250 acres.

Repairs to roads.

44. Repairs to the main roads in the Kinwat Reserve have been made at a cost of Rs. 102.

Buildings.

45. Five new thanas, costing in the aggregate Rs. 140, have been erected in the following reserves:—

Kinwat ...	1	Patroat ...	1
Kelapur ...	2	Phiski ...	1

Rights in reserves.

46. Excepting rights of way no rights exist in any of the reserves in this division.

With regard to the village of Kapri, situated in the heart of the Kelapur Reserve, but which is entirely excluded from it, proposals will shortly be submitted for resuming the whole area, giving other land from the reserve in exchange, and also a money compensation for buildings, wells, &c.

3.—*Yield and Working.*

Yield and working.

47. No fellings were made except in cutting the boundary lines, from which 675 teak bullies were obtained, all of which were sold.

Bamboos and grass were the only articles of export, and the following quantities were disposed of:—

		1880-81.	1881-82.
Bamboos ...	... No.	7,875	33,200
Grass ...	... lbs.	199,080	... 4,751,880

4.—*Financial Results.*

Financial results.

48. The financial results are given in the subjoined statement:—

Budget Heads.	Kinwat.		Kelapur and Wun Range.		Yeotmal and Darwha Range.		Total.	
	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.
Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Timber, &c., removed by Government ...	...	...	...	...	...	...	...	...
II.— Do. by purchasers ...	121	152	15	1,209	...	563	136	1,924
III.—Confiscated, &c., wood ...	...	...	...	...	...	2	...	2
Total ..	121	152	15	1,209	...	565	136	1,926
Expenditure.								
Works A.	1,333	585	226	1,030	...	460	1,559	2,075
Establishment B.	1,418	1,396	1,366	2,020	...	1,279	2,784	4,695
Total ...	2,751	1,981	1,592	3,050	...	1,739	4,343	6,770

No satisfactory comparison can be made between the figures of the two years since the division as now constituted was only formed on the 1st April 1881.

The receipts and charges of the Divisional Office were—

	1880-81. Rs.	1881-82. Rs.
Receipts	...	...
Working charges A.	...	146
Establishment charges B.	5,003	6,772
	5,003	6,918

(b.)—DISTRICT RESERVED FORESTS.

Direction Division.

1.—*Area and Boundaries.*

Changes in area.

49. The area of District Reserves has been reduced by 80,535 acres, owing to the transfer of the reserves already mentioned to the class of State Forests. There still remained at the close of the year an area of 197,158 acres, or about 308 square miles, but the greater portion of this area consists of small babul buns or scrub jungle, and will be dealt with in the re-classification of the district forests now in progress. No changes in area took place in the Ellichpur and Amraoti Districts, while such as have occurred in the Akola, Buldana, Wun, and Basim Districts are explained in Form 49.

2.—*Protection and Improvement.*

Prosecutions for breaches of the forest rules.

50. The following is a comparative statement of the prosecutions instituted for breaches of the forest rules during the last two years. This statement includes cases pertaining to the Unreserved Forests of the Direction Division:—

District.	1880-81. Cases.	1880-81. Convictions.	1881-82. Cases.	1881-82. Convictions.
Ellichpur ...	12	5	27	18
Amraoti ...	24	20	19	14
Akola ...	23	23	16	9
Buldana ...	19	16	15	12
Basim ...	27	22	50	46
Wun ...	47	35	75	71
	152	121	202	170

There has been an increase of 50 in the number of cases, whilst the proportion of convictions to prosecutions has risen five per cent. None of the cases were of any great importance.

Fire protection.

51. Grazing was permitted in all the reserves, and consequently comparatively little damage was done by fire. No systematic fire protection was, however, attempted.

3.—*Yield and Working.*

Yield and working.

52. It is impossible to show the yield of these forests for the reasons given in para. 56 of the Report for 1880-81.

4.—*Financial Results.*

Financial results.

53. The following is a statement of the financial results :—

Budget Heads.	Ellichpur District		Amraoti District.		Akola District.		Buldana District.		Basim District.		Total.	
	1880-81	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.
Receipts.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
II.—Timber, &c., removed by purchasers.	2,724	1,916	28,674	4,237	794	661	723	839	2,428	801	35,343	8,454
III.—Confiscated and waif wood ...	...	...	7	...	...	...	...	53	...	...	7	53
V.—Miscellaneous ...	...	...	8	...	...	...	...	...	...	...	8	...
Total ...	2,724	1,916	28.689	4,237	794	661	723	892	2,428	801	35,358	8,507
Expenditure.												
Working charges A.	306	334	1,132	...	166	623	...	342	11	109	1,615	1,408
Establishment charges B.	791	433	1,595	...	943	1,375	...	...	1,950	1,333	5,279	3,141
Total ...	1,097	767	2,727	..	1,109	1,998	...	342	1,961	1,442	6,894	4,549
Surplus ...	1,627	1,149	25,962	4,237	...	...	723	550	467	...	28,464	3,958
Deficit ...	...	...	...	...	315	1,337	...	...	...	641	...	...

The only figures that call for remark are those concerning Amraoti, where the decrease in revenue and expenditure is due to the transfer of the Hills Reserve. In Buldana the whole establishment has been charged to the Unreserved forests. In Wun the reserves are not managed separately from the unreserves, and no figures can therefore be given.

CHAPTER III.—Unreserved Forests.

A.—Melghat Division.

1.—*Area and Boundaries.*

54. The unreserved forests of the Melghat being in charge of the Divisional Forest officer, and worked exclusively by him, it is desirable to treat of them separately from the unreserved forests managed by district officers.

Changes in area.

There have been no changes in area during the year.

2.—*Protection and Improvement.*

Prosecutions for breaches of the forest rules.

55. Of 132 prosecutions for breaches of the Forest Rules 110 were successful. Most of the cases were for evading payment of dues at the nakas.

Dhya cultivation.

56. The measures adopted in October 1880, and referred to in para. 65 of the Report for 1880-81, for preventing dhya cultivation and checking the wasteful cutting of bamboos for fodder have proved beneficial.

No fresh dhyas have been reported, and in the few instances in which bamboos have been felled for fodder heavy fines have been inflicted, and the practice, thus put a stop to.

Buildings.

57. Four new "nakas" have been erected and fourteen old ones repaired at a cost of Rs. 461

Other works.

58. The following additional works have been undertaken :—

Works.	Cost.
Repairing hedges round naka compounds ...	Rs. 170 0 0
Repairing 252 boundary marks in waste fields of the Ellichpur and Akola Districts situated within line of nakas ...	38 8 0
	208 8 0

2.—*Yield and Working.*

Yield and working.

59. The approximate yield and the number of cattle grazed are shown in Appendices E. and F. respectively. Compared with last year there has been a considerable decrease in the export of teak and bamboos.

Thus—

		1880-81.	1881-82.	Decrease.
Teak, tewas, and shesham	C. ft.	164,331	125,215	39,116
Bamboos	No.	1,516,800	1,035,600	481,200

The falling-off in teak is ascribed to the tax on "bullies" having been quadrupled, which has entirely prevented the export of this description of wood, and caused a decrease in revenue of about Rs. 12,000. I am not certain that it was altogether a wise measure to put a prohibitive duty on "bullies." The export might have been lessened, if thought necessary, by a slight addition to the tax. And even if the unreserved forests did become exhausted of teak, an event which was anticipated, had the prohibitive duty on "bullies" not been imposed, the reserves are quite capable of meeting all requirements.

The policy hitherto adopted of interfering as little as possible with the unreserved forests should, I think, be continued An increased demand for "bullie" might cause the size of teak in these forests to diminish, but I doubt if it would have much effect on the life of so hardy a tree.

Every encouragement ought, I consider, to be given to the "Kurkus" to build a better description of house, and it will be very difficult if not impossible, to persuade them to make bamboos take the place of "bullies" The reserves alone cannot well supply "bullies" unless there is a simultaneous demand for larger wood, as they would consist principally of the ends of branches.

It is difficult to account satisfactorily for so large a decrease as 481,200 in the number of bamboos exported, as the price of this description of produce has ruled high during the year.

The crops in the Melghat have been particularly good, and the Kurkus have in consequence not been as dependent on the sale of forest produce for a living as in former years.

A comparative statement of the exports of the Reserved and Unreserved Forests of the Melghat, prepared in accordance with para. 7 of the Review by the Government of India of the Report for 1879-80 is given in Appendix G.

4.—*Financial Results.*

Financial results.

60. The subjoined statement exhibits the financial results:—

Budget Head.	1880-81. Rs.	1881-82 Rs.
Receipts.		
II.—Timber, &c., removed by purchasers—		
a. Timber ...	60,878	50,318
b. Firewood and charcoal	8,065	7,565
c. Bamboos ...	15,168	10,356
d. Grazing and fodder grass	16,536	11,382
e. Other minor produce	1,357	2,967
III.—Confiscated and waif wood	154	70
V.—Miscellaneous—		
c. Other sources ...	9	13
Total	1,02,164	82,666
Expenditure.		
Working charges A. ...	21,222	3,199
Establishment charges B. ...	7,378	7,403
	28,600	10,602
Surplus	73,564	72,064

The decrease under heads II-*a* and II-*c* has already been explained. The decrease under II-*d* was due to the early and copious rainfall of the year, and the consequent abundance of grass everywhere.

The decrease under working charges A. was owing to compensation of the Melghat Rajas having been included in divisional office expenditure.

B.—Direction Division.

1.—*Area and Boundaries.*

Changes in area.

61. The area of Unreserved Forests has been increased by 102,786 acres, owing chiefly to the inclusion of a large extent of free grazing land hitherto omitted from the returns. The details of these forests are given district by district in Form 49.

The figures have little interest at present, as the entire area to which they relate is being reclassified.

A decided advance will have been made when this work has been completed, and the area of unreserved forests to be permanently retained has been fixed.

Under present arrangements, whereby these forests consist of all the unoccupied wastes in the province, the area is subject to constant variation as cultivation is abandoned or waste land taken up.

2.—*Protection and Improvement.*

Progress made in re-classification.

62. The forests of two taluks, Yeotmal and Mangrul, have already been re-classified, but final orders have not yet been passed regarding them.

The system on which the work has been carried out was sketched in para. 56 of the Report for 1880-81. Nineteen taluks have yet to be done, but the preliminary statements for many of them have been prepared, and rapid progress with the work of classification is expected to be made next marching season.

3.—*Yield and working.*

Yield and working.

63. It is impossible to show the yield of these forests, as most of the produce is exported free of duty.

4.—*Financial results.*

Financial results.

64. The revenue and expenditure stand as follows :—

Budget Heads.	Ellichpur.		Amraoti.		Akola.		Buldana.		Wun		Basim		Total	
	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.	1880-81.	1881-82.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts														
II.—Timber, &c., removed by purchasers—														
(*a*).—Timber	3	...	.	..	16	.	1,729	2,236	3,650	1,822	...	248	5,407	4,306
(*b*).—Firewood and charcoal	...	...	198	1,031	651	1,271	571	586	178	157	1,448	1,490	3,046	4,535
(*c*).—Bamboos				..	56	43	..	...	658	330	17	27	731	400
(*d*).—Grazing and fodder grass	2,055	1,278	27,460	36,409	17,478	13,365	16,401	15,101	21,115	20,427	5,130	5,703	89,639	92,183
(*e*).—Other minor produce	284	724	2,563	2,810	678	570	1,250	1,071	4,347	4,051	5,192	4,754	14,314	13,980
III.—Confiscated and waif wood	774	1,607	1	35	...	...	154	237	386	137	...	...	1,315	2,016
V.—Miscellaneous—														
(*a*). Fines and forfeitures	...	...	...	...	...	...	...	5	...	...	...	...	..	5
(*b*). Refunds	...	...	...	47	...	...	...	...	74	17	...	...	74	64
(*c*). Other sources	...	300	...	...	725	398	...	10	22	101	...	38	747	847
Expenditure.														
Total	3,116	3,909	30,222	40,332	19,604	15,647	20,105	19,246	30,439	27,042	11,787	12,26	115,273	1,18,436
Working charges, A.	123	9	6,324	2,815	...	6,243	165	4,270	5,384	2,582	217	721	12,2[illegible]9	16,640
Establishment do. B.	...	...	...	976	...	...	874	852	3,100	1,663	...	...	3,974	3,491
Total	123	9	6,324	3,791	...	6,243	1,039	5,122	8,484	4,245	217	721	16,187	20,131
Surplus	2,993	3,900	23,898	36,541	19,604	9,404	19,066	14,124	21,955	22,797	11,570	11,539	99,086	98,305
Deficit	.	.	.	..	.	.	..	.	.	.	.	.	.	.

The figures for Wun include the receipts and charges of the District Reserves.

The joint financial results of the working of the District Reserves and the

Direction Division Unreserves are given in Appendices B., C., and D. The receipts and charges of the Direction Office were :—

	1880-81.		1881-82.
	Rs.		Rs.
Receipts	484	...	26
		...	
Working charges A. ...	3,017	...	5,611
Establishment charges B. ...	16,533	...	20,350
Total ...	19,550	...	25,961

The increase under Working charges A. was due to the purchase of an elephant to replace one that died.

The increase under Establishment B. was in consequence of Mr. Bagshawe's pay being debited to the Direction Office in addition to that of the Conservator.

CHAPTER IV.—General Remarks.

Reduction of revenue survey maps of reserves.

65. During the year Mr. Stewart has reduced the revenue survey maps of six reserves from the 8″ to a 2″ scale, and made 56 tracings of maps reduced in former years. The reduced maps of eight reserves have also been photozincographed, 20 copies being obtained in each case

New topographical maps of reserves required.

66. There are no good topographical maps of any of the reserves in Berar, and should the re-survey of the Melghat be sanctioned, a simultaneous survey might with advantage be made of the other reserves. Work could then be provided for the survey establishment during the whole year, for when operations were brought to a stand-still in the Melghat owing to the unhealthiness of the country, the establishment might be employed in other parts of Berar.

Rainfall and flood registers.

67. The registers of rain-fall, &c., in the different reserves are shown in Appendix H. Flood registers are no longer maintained in the Melghat, as after communicating with the Meteorological Reporter to the Government of India and the Superintending Engineer, Hyderabad, I discovered that the registers as kept by this department were of little practical use.

The Superintending Engineer has kindly promised to employ some of his staff in gauging the floods of 1883. Two rivers have been selected for the purpose, the Kapra and the Ban, the former flowing for its whole course through the Bairagarh Reserve, and the latter taking its rise in the Unreserved Forests and flowing through them till it enters the plains of Berar near the village of Wari.

Fines inflicted.

68. Fines aggregating Rs. 166 were inflicted on 45 subordinates.

Notice of Officers.

69. Mr. Bagshawe held charge of the Department till the 7th November 1881, when I relieved him on return from furlough.

His services have been retained for the classification of the District Forests.

The Divisional Officers have worked well, and they report favourably of their subordinates with few exceptions.

I have the honour to be,

Sir,

Your most obedient Servant,

A. T. DRYSDALE,

Conservator of Forests,

Hyderabad Assigned Districts.

APPENDICES.

FORESTS.

APPENDIX A.—*Statement showing District Reserved and Unreserved Forests under Deputy Commissioners*

Forest Divisions.	Districts.	Taluks.	Area of District Reserves. Babul buns	Other buns including ramnas and coppices.	Total	Unreserved Forests.	Grand Total
	Amraoti.	Amraoti	2,092	248	2,340	983	3,323
		Chandur	2,040	5,956	7,996	13,194	21,190
		Morsi	2,061	1,703	3,764	41,747	45,511
		Murtazapur	1,216	10,952	12,168	6,748	18,916
		Total	7,409	18,859	26,268	62,672	88,940
	Akola.	Akola	66	19,784	19,850	32,062	51,912
		Akot	1,254		1,254	6,443	7,697
		Balapur	208	25,452	25,660	10,347	3 ,007
		Jalgaon ..	1,526		1,526	22,187	23,713
		Khamgaon	342	...	342	11,271	11,613
		Total	3,396	45,236	48,632	82,310	130,942
	Ellichpur.	Daryapur	2,297		2,297	4,600	6,897
		Ellichpur	2,194		2,194	20,258	22,452
		Total	4,491		4,491	24,858	29,349
	Buldana.	Chikhli ..	642	4,148	4,790	87,763	92,553
		Malkapur ...	550	8,717	9,267	25,143	34,410
		Mehkar ...	536	1,877	2,413	91,166	93,579
		Total	1,728	14,742	16,470	204,072	220,542
	Wun.	Darwha	1,865	17,154	19,019	175,838	194,857
		Kelapur	161	47,192	47,353	109,363	156,716
		Yeotmal	323	181	504	82,021	82,525
		Wun	28	9,225	9,253	130,629	139,882
		Total	2,377	73,752	76,129	497,851	573,980
	Basim.	Basim .	2,013	8,048	10,061	89,288	99,349
		Mangrul ...	307	10,747	11,054	91,344	102,398
		Pusad ...	350	3,703	4,053	279,719	283,772
		Total	2,670	22,498	25,168	460,351	485,519
		Grand Total	22,071	175,087	197,158	1,332,114	1,529,272

FORESTS.

APPENDIX B.—*Statement showing income realized by Civil Officers from Forests (Reserved and Unreserved) under their control in* 1881-82.

	Amraoti.	Akola.	Ellichpur.	Buldana.	Wun.	Basim.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Grazing sales, Rule XIV.	40,071 3 0	6,190 10 0	1,154 8 0	8,416 8 0	...	3,616 8 0
2. Do. „ XV.		3,142 12 6	...	161 8 0	...	267 0 0
3. Do. „ XVI.		4,030 5 0	122 8 0	5,430 0 0	...	2,086 12 8
4. Do. „ XIV and XVI	...	..	...	1,092 8 0	...	...
5. Grazing cess	...	...	1,277 4 0	...	20,426 10 11	...
Total ...	40,071 3 0	13,363 11 6	2,554 4 0	15,100 8 0	20,426 10 11	5,970 4 8
6. Grazing in reserves	...	...	...	779 0 0	...	38 9 0
7. From sale of grass	...	...	...	...	...	495 6 0
8. Mango trees, produce of	2,809 8 9	566 8 0	457 11 6	1,071 6 0	4,050 10 0	386 5 6
9. Mowha trees do.			266 11 0			898 10 6
10. Sale of cuttings in babul buns	...	619 0 6	632 0 3	19 2 0	...	27 3 11
11. Minor forest produce	...	..	7 0 0		255 10 6	...
12. Passes under Rule I.	...	...	...	1,475 5 5	1,821 10 4	...
13. Do. „ II.	...		...	...	...	339 5 0
14. Do. „ III.	...	306 10 0	...	761 13 0	...	3,074 3 0
15. Do. „ IV.	1,605 13 9	...	...	...	...	...
16. Do. „ V.		227 7 9	..	439 0 6	...	922 13 9
17. Do. „ VI.	..	1 8 0	..	196 7 0	486 8 9	636 10 9
18. Sale of dry and decayed trees ...	35 3 9	986 12 6	1,606 10 6	289 15 1	...	233 7 6
19. Confiscated wood		...	1 3 0			
20. Fines	47 10 0	...	..	5 0 0	...	...
21. Miscellaneous	...	236 0 10	300 0 0	0 5 0	...	38 0 0
Grand Total ...	44,569 7 3	16,307 11 1	5,825 8 3	20,137 14 0	27,041 2 6	13,060 15 7

FORESTS.

APPENDIX C.—*Statement showing the working of the Forest Rules*, 1881-82.

District.	District Forest Acres.			Passes granted under Rule I.				Passes granted under Rule II.				Passes granted under Rule III.				Passed granted under Rule IV.				Passes granted under Rule V.				Passes granted under Rule VI.			
	Reserved.	Unreserved.	Total.	Area in which granted.	Officer granting.	No. granted.	Amount realised.	Area in which granted.	Officer granting.	No. granted.	Amount realised.	Area in which granted.	Officer granting.	No. granted.	Amount realised.	Area in which granted.	Officer granting.	No. granted.	Amount realised	Area in which granted.	Officer granting.	No. granted.	Amount realised.	Area in which granted.	Officer granting.	No. granted.	Amount realised.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
							Rs a. p.				Rs. a. p.				Rs. a. p.				Rs.				Rs. a. p.				Rs. a. p.
Amraoti..	26,268	62,672	88,940	..	...	...	...		..		...	.		..	..		...	.	...	26,166	Patels ...	519	1,605 13 9	...	...	..	...
Akola ...	48,632	82,310	130,942	...	...			...	...	..	.	5,106	Forester and Patels.	65	306 10 0	...	...	..	...	26,454	Patels ...	338	227 7 9	154	Patels .	12	1 8 0
Ellichpur.	4,491	24,858	29,349	..	...		.	...	...	.	.		..	.	...	...	...	...	...	..	..	...	...	...	...	..	...
Buldana..	16,470	204,072	220,542		Forester and Patels of 2 villages.	52	1,475 5 5	..	..	.	.	...	Forester and Patels of 59 villages.	487	761 13 0	...	...	...	...	..	Forester and Patels of 39 villages.	497	439 0 6		Patels of 19 villages.	108	196 7 0
Wun ...	76,129	497,851	573,980	...	Tahsildar		1,821 10 4	...	.	.	.	...	.		..	..	...		.	..	...	.	...	...	Tahsildar.	.	486 8 9
Basim	25,168	460,351	485,519					3, 747	Deputy Commissioner.	6	339 5 0	460,351	Tahsildar and Patels.	1,994	3,074 3 0		..	.	.	460,351	Tahsildar and Patels.	1,852	922 13 9	460,351	Tahsildar and Patels.	329	636 10 9
Total	197,158	1,332,114	1,529,272	..	..	52	3,296 15 9	31,747	.	6	339 5 0	465,457	.	2,546	4,142 10 0					512,971	.	3,206	3,195 3 9	460,505	.	449	1,321 2 6

APPENDIX D.

FORESTS.

APPENDIX D.—*Statement showing expenditure by District Officers on account of Forests in* 1881-82.

	Amraoti.	Akola.	Ellichpur.	Buldana.	Wun.	Basim.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.
Percentage to village officers for collecting grazing dues ..	2,621 11 0	5,969 7 10	86 12 5	4,091 6 11	2,418 1 8	104 0 1	15,592 9 9
Do. do. revenue on fruits .	42 4 0	180 14 10	1 4 7	137 4 5		...	
Do. do. passes, Rule I. .	...		...		...		
Do. do. do. Rule II.	...	40 13 3	...		...		
Do. do. do. Rule III.	...		...		...		
Do. do. do. Rule IV.		...	...	150 15 5	...	513 13 0	802 1 3
Do. do. do. Rule V.	87 1 0	1 11 9	...		...		
Do. do. do. Rule VI.		7 10 10	...		...		
Total .	2,750 6 0	6,140 10 6	88 1 0	4,379 10 9	2,418 1 8	617 13 1	16,394 11 0
I.—Timber and other produce removed from the Forests by other Government agency:—							
(*a.*) Timber	..	..	...	...	...	...	...
(*b.*) Firewood and Charcoal	...	...	...	...	...	...	...
(*c.*) Bamboos		...	...	...	...	...	...
(*d.*) Sandal-wood		.	...	...	...	...	...
(*e.*) Grass and other Minor Produce ..	..	.	..	...	..	...	...
II.—Timber and other produce removed from the forests by consumers or purchasers	...	..	241 13 0	65 12 0	63 11 0	...	371 4 0
III.—Confiscated, drift and waif wood	...	...	.	...	...	...	...
IV.—Revenue from forests not managed by Government:—							
(*a.*) Duty on foreign timber and other forest produce .	.	..	...	...	...	...	...
(*b.*) Revenue from shared and private forests .	..	...	...	...	...	...	...
V.—Rent of leased forests and payments to shareholders in forests managed by Government...	...	..	...	...	...	...	...
VI.—Live stock, stores, tools and plant:—							
(*a.*) Purchase of cattle	.	..	...	...	...	...	...
(*b.*) Feed and keep of cattle			...	...	...	...	...
(*c.*) Stores, tools and plant	4 8 0	140 11 0	13 0 0	17 7 6	43 8 0	...	219 2 6

VII.—Communications and buildings:—							
(a) Roads and bridges ...	...	...	...	...	...	...	...
(b.) Buildings	...	...	...	...	..	67 8 0	67 8 0
(c.) Other works	...	...	...	...	...	...	...
VIII.—Demarcation, improvement, and extension of forests:—							
(a.) Demarcation	..	...	...	...	...	...	...
(b.) Compensation for land and rights	...	...	...	...	...	...	...
(c.) Surveys and working plans ...	...	...	...	...	...	...	...
(d.) Plantations	60 0 0	...	...	...	...	...	60 0 0
(e.) Protection from fire	...	...	...	...	...	...	...
(f.) Other works	...	557 9 4	...	149 5 0	...	40 0 0	746 14 4
IX.—Miscellaneous:—							
(a.) Refunds	...	27 4 0	...	...	57 6 0	102 13 11	187 7 11
(b.) Law charges	...	...	...	...	...	..	...
(c.) Other charges	...	0 6 0	...	0 7 6	...	1 0 0	1 13 6
I.—Salaries:—							
(a.) Conservators	...	...	...	...	...	...	...
(b.) Superior officers	...	...	...	...	...	...	...
(c.) Subordinate Forest and depôt establishments ...	937 0 0	1,348 8 0	428 0 0	839 10 6	1,647 2 3	1,333 7 6	6,533 12 3
(d.) Office establishments	...	...	...	...	...	...	...
(e.) Deputation and special allowances	...	...	...	...	...	...	...
II.—Travelling allowances:—							
(a.) Conservators	...	...	...	...	...	...	...
(b.) Superior officers	...	...	...	...	...	...	...
(c.) Subordinate Forest and depôt establishments ...	1 12 0	8 9 9	...	...	...	...	10 5 9
(d.) Office establishments	...	..	...	...	...	...	...
III.—Contingencies:—							
(a.) Stationery	3 8 0	12 12 0	5 4 0	5 12 6	12 8 0	...	39 12 6
(b.) Carriage of tents and records	...	...	...	...	...	...	...
(c.) Rents, rates and taxes	31 4 7	...	...	...	...	...	31 4 7
(d.) Pay of police guards	...	...	...	...	...	...	...
(e.) Official postage	...	3 0 0	...	5 0 0	...	...	8 0 0
(f.) Sundries	2 0 0	1 13 0	...	1 0 6	3 3 0	...	8 0 6
Total...	1,040 0 7	2,100 9 1	688 1 0	1,084 7 6	1,827 6 3	1,544 13 5	8,285 5 10
Grand total of expenditure...	3,790 6 7	8,241 3 7	776 2 0	5,464 2 3	4,245 7 11	2,162 10 6	24,680 0 10

FORESTS.

APPENDIX E.

Forest Division.	Description of produce.	Karas or two-bullock dragging load.	Cart load.	Camel load.	Bullock, pony or doukey load.	Head load.	Bundles.	Number	Cubic feet of solid wood.	Weight in lbs	Value in Rs.	Total per Budget head	Budget head.
	State Forests.												
Melghat Division.	Teak, tewas, &c., removed by Government agency	4,759	...	...		5	...	...	16,659	.	3,586	3,586	I a.
	Bamboos do. do	...	...	...	.	...	.	4,350		...	44	44	I c.
	Teak, tewas, &c., removed by purchasers	1,048½	...	...		2,187½	...	.	4,626	..	1,321	1,384	II a
	Other kind of wood do.	68¾	...	...	.	282	...	...	434	..	63		
	Bamboos do	...	...	...	...	...	...	613,300	.	...	6,133	6,133	II. c.
	Lac do.	...	...	...	...	182	...	...	.	9,464	28	309	II. e.
	Roots and fruits do	...	...	...	969	22	...	...	..	102,889	841		
	Miscellaneous do,	...	...	...		...		..			61	61	V.
	Total	5,896	...	...	969	2,678½		617,650	21,719	112,352	11,517	11,517	
Amraoti Range.	Other kind of wood removed by purchasers	...	14	...		5,214½	..		2,477		555	555	II. a.
	Firewood and charcoal do.	...	2,315	...	4,010	25,479			171,918		2,080	2,080	II b
	Grass do.	...	1,383	...	12,053	24,704	.	...		3,711,893	2,421	6,954	II. d.
	Grazing	...	...	...	..			...	...		4,533		
	Other minor produce	...	...	...		1,340		...		69,680	53	53	II. e.
	Confiscated, &c., wood	...	...	...		.		...			5	5	III.
	Total	...	3,712	...	16,063	56,737½		...	174,395	3,781,573	9,597	9,597	
South Burar Division.	Firewood and charcoal removed by purchasers	...	63					...	882		79	79	II b.
	Grass do	...	...	...		...		.		3,772,440	884	884	II d.
	Confiscated wood	...	...	.		.		...		..	3	3	III.
	Miscellaneous	...	...			.	.	.			3	3	V.
	Total	...	63	...	...		...		882	3,772,440	969	969	
Wun Division.	Teak, tewas removed by purchasers	566	...		..	..	..	...	1,981		526	531	II a.
	Other kinds of wood do.	...	13	...	.	...	.	..	182	.	5		
	Bamboos do	...	...	.	..	...	...	33,200		...	332	332	II c
	Grass do	...	...	...	..		.		..	4,751,880	1,061	1,061	II. d.
	Confiscated, &c , wood	...	...	.	..				.		2	2	III.
	Total	566	13	...	...	..		33,200	2,163	4,751,880	1,926	1,926	
	Grand Total	6,462	3,788		17,032	59,415½		650,850	199,159	12,418,246	24,009	24,009	
	Unreserved Forests.												
Melghat Division.	Teak, tewas, &c., removed by purchasers	29,304	...	...	...	51,772½		...	125,215	...	35,775	50,313	II a.
	Other kinds of wood	25,374½	...	...	.	29,609		...	101,764	..	14,538		
	Firewood	...	9,561	22	16,718	.		...	163,264	...	4,506	7,565	II b.
	Fuel used for making charcoal	...	322	...	7,236	5,886	.	..	19,746	...	3,059		
	Bamboos	...	...	...	.		...	1,035,600			10,356	10,356	II c.
	Grass	...	5,735	11	13,818	.	...		...	6,272,910	1,723	11,382	II. d.
	Grazing	...	...		...			..		.	9,659		
	Lac	...	4½		28	424½		...	..	28,781	200		
	Teak leaves	...	...		...		10,572	...	...	549,744	661		
	Roots and fruits	...	80	2	4,193	13,734	...			1,222,473	1,986	2,967	II. e.
	Gum	...	17		2	17	.	...		15,374	57		
	Other minor produce	...	9½	..	15	170	...	...		18,395	63		
	Confiscated wood	...	...					...			70	70	III.
	Miscellaneous...	...	...		..		...				13	13	V
	Total.	54,678½	15,729	35	42,010	1,016,613½	10,572	1,035,600	409,989	8,107,677	82,666	82,666	

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FORESTS.

APPENDIX F.

	Districts, &c.	Year.	Camels	Buffaloes.	Cows and bullocks.	Sheep and goats.	Total.
Melghat Division	Melghat and Central Provinces	1880-81	15	6,206	23,422	3,978	33,621
		1881-82	...	5,752	22,114	5,389	33,255
	Daryapur and Ellichpur Taluks of Ellichpur District	1880-81	55	9,903	59,205	11,163	80,326
		1881-82	145	5,900	40,205	20,177	66,427
	Akola District	1880-81	73	12,373	65,883	7,246	85,575
		1881-82	136	4,454	30,156	6,700	41,446
	Total ...	1880-81					199,522
		1881-82					141,128
Amraoti Range		1881-82	152	4,892	20,395	9,806	35,245

APPENDIX G.

Return of estimated exports of Timber, &c., from the Melghat Forests.

Produce.		1880-81.			1881-82.		
		C. ft.	No.	Rs.	C. ft.	No.	Rs.
Teak, &c.	State Reserves	6,957	...	1,988	21,285	...	4,875
	Unreserves	164,431	...	46,952	125,215	...	35,808
Other kind of wood	State Reserves	579	...	84	434	...	95
	Unreserves	97,488	...	13,926	101,764	...	14,505
Bamboos	State Reserves	...	556,603	5,566	...	617,650	6,177
	Unreserves	...	1,516,800	15,168	...	1,035,600	10,356
Miscellaneous—grass, grazing, &c.	State Reserves	...	...	1,095	...	...	370
	Unreserves	...	...	26,118	..	...	21,997
	Total ...	269,455	2,073,403	1,10,897	248,698	1,653,250	94,183

nths.	Mean of Hygrometer.								Mean of Thermometer.					
	Chikalda.				Makhla.				Chikalda.			Makhla.		
	10 A. M.		4 P. M.		10 A. M.		4 P. M.		10 A. M.			10 A. M.		
	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Dry maximum.	Dry minimum.	Wet minimum.	Dry maximum.	Dry minimum.	Wet minimum.
1881 ...	83·4	61 6	89·1	63·1	82·6	65·2	92·6	69·8	91·2	72·0	56·4	84·9	72·6	62 5
„ ..	85·4	65·8	92·6	66·6	86·2	69·5	98·1	73·8	91·9	73·8	60·1	88·6	75·8	66·4
„ ...	71·8	68·3	77·5	70·2	74·7	71 2	80·9	73·0	77·[illegible]	66·8	65·2	75·9	70·2	67·1
„ ...	68·7	67·6	72·2	69·5	70·9	69·7	73·4	71·6	73·9	65·3	64·9	71·7	67·6	66·8
„ ...	68·7	67·7	71·1	69·3	70·4	69·3	74·0	71·8	72·8	65·4	65·2	71·2	68·0	67·0
r „ ...	70·2	68·2	72·4	69·1	71·5	69·8	75·2	72·3	75·3	65·0	64·4	72·4	67·0	66·0
„ ...	74·1	64·1	74·1	63·7	72·7	65·9	76·6	68·5	77·5	62·5	56·8	74·1	63·5	59·3
„ ...	69·5	58 0	68·9	58·5	68·8	59·2	74·1	64·5	74·9	57·1	49·8	70·3	58·3	52·4
„ ...	69·3	56·5	70·5	57·4	67·6	56·8	73·1	61·5	75·1	54·9	48·2	69·5	56·2	50·7
1882 ...	70·9	55·2	74·1	56·3	68·4	57·3	74·9	62·0	77·0	58·0	47·8	70·3	57·8	51·4
„ ...	70·5	55·8	75·1	56·9	69·6	58·2	78·2	63·4	77·7	58·0	46·3	71·4	58·6	50·9
„ ...	81·1	60·8	86·2	62·6	82·6	63·1	88·8	65·9	87·3	69·4	53·1	84·2	70·6	57·6
Total ...	73·6	62·4	76·9	63·6	73·8	64·6	80·0	68·1	79·6	64·0	56·5	75·4	65·5	59·8

nths.	Rain-fall.																																									
	Chikalda Reserve.			Bairagarh Reserve.															Garu-Matergaon Reserve.			Ghatbori Reserve.			Penganga Reserve.			Kinwat Reserve.			Kalapur Reserve.		
	Chikalda.			Makhla.						Raipur.			Pili.			Patia.			Ganesh Chowky.			Butchwady.			Marwadi Khurd.			Sohdabi.			Sun.		
				Tree gauge.			Ground gauge.																																			
	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.
1881 ...	...	15	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20	1	...	...	...	...	...	...	...	...	...	...	...	...
„ ..	...	...	..	...	11	1	...	11	1	2	44	1	...	25	1	...	...	..	1	5	4	...	...	...	...	54	2	...	...	...	...	...	...
„ ...	20	35	14	27	57	13	28	24	13	18	52	10	20	86	10	15	29	14	10	43	10	6	94	7	5	6	14	3	71	8	...	...	...
„ ...	28	9	27	46	92	28	47	83	28	26	31	28	29	11	27	26	97	27	8	59	14	9	45	15	7	57	12	9	11	10	...	...	...
„ ...	14	30	24	27	44	30	28	24	30	9	58	21	12	60	26	10	21	25	6	95	15	11	88	19	9	66	17	8	12	7	3	51	8
r „ ...	7	55	17	9	93	24	10	12	24	9	22	12	9	56	14	8	22	20	4	5	8	6	25	8	5	16	13	12	8	10	6	51	14
„ ...	4	1	4	2	19	5	2	22	5	...	...	...	2	37	4	1	41	4	1	35	4	3	56	4	1	42	3	1	19	3	1	60	4
„ ...	7	18	4	1	14	2	1	16	2	...	...	...	...	42	2	...	...	...	...	33	2	1	31	2	2	93	4	3	75	3	2	31	4
„ ...	...	...	..	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	..	...
1882 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	75	1	...	28	1	...	43	1	...	...	...	...	...	...
„ ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ ...	..	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	1	3	1	...	...	...
Total ...	75	63	91	115	30	103	117	92	103	66	7	72	75	17	84	62	10	90	33	70	59	39	67	56	32	77	66	38	99	42	13	93	30

FORESTS.

ANNUAL FORM No. 49.—*Area of Reserved Forests*, 1881-82.

Division or Range.	Civil district or territory.	Name of forest.	Area on 1st April 1881. Acres.	Area on 1st April 1881. Equivalent in square miles	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1882. Acres.	Area on 31st March 1882. Equivalent in square miles.	No. and date of notification of addition or transfer.	Remarks.
		DEMARCATED STATE FORESTS.								
Melghat Division ..	Ellichpur District	Bairagarh Reserve ...	272,049	425	...	...	272,049	425		
		Gugamal do.	115,200	180	...	...	115,200	180		
		Chikalda do.	2,400	4	...	...	2,400	4		
Amraoti Range .	Amraoti do.	Amraoti Hills do. .	49,847	78	...	...	49,847	78		
	Buldana do. ...	Garmatergaon Reserve ...	45,992	72	...	...	45,992	72		
	Buldana-Akola, Basim District.	Ghatbori do. ..	23,760	37	...	...	23,760	37		
South Berar Division	Akola District	Pimpri Dhangar do. ...	...		(a) 5,333	...	5,333	8	(a) No. 1182, dated 8th June 1881, from Secretary for Berar to the Commissioner, Hyderabad Assigned Districts.	
		Loni do. ...	..	.	(b) 911	...	911	1		
		Bhongaon do. ...	...	.	(c) 1,368	...	1,368	2	(b) No. 739, dated 11th April 1881, from do. to do.	
	Basim do. ...	Pungangi do. ...	11,575	18		...	11,575	18	(c) No. 773, dated 14th April 1881, from do. to do.	
		Rui do. ...	.	...	(d) 6,578	...	6,578	10	(d) Commissioner's No 6380, dated 13th December 1881.	
		Kinwat do. ...	52,558	82	...	(e) 52,558	...	...	(e) No. 170-F., dated 16th February 1881, from the Offg Secretary to Government of India to the Resident at Hyderabad.	
	Basim do. ...	Kinwat do .	...	...	(e) 52,558	...	52,558	82		
		Kelapur do. ...	40,747	64	...	...	40,747	64		
		Gondwakri do. ...	..	...	16,347	...	16,347	26		
		Korad do. ...	...		16,117	...	16,117	25		
		Patroat do. ...	...	...	2,889	...	2,889	5		
		Anjankhur do. ..	...	.	7,579	...	7,579	12		
		Loubchel do. ...	...	...	9,956	...	9,956	16		
Wun District .	Wun District ...	Teak Tracts at Mangla, Renkapur, Dapura, Jalgaon, Aurangpur do. ...	...	.	(f) 153	.	153	...	(f) Commissioner's No. 2137, dated 29th April 1881.	
		Phiski do. ...	...	...	2,342	...	2,342	4		
		Tiwsala do ...	...	..	3,596	...	3,596	6		
		Bhiokund do. ...	...	...	3,433	...	3,433	5		
		Kishnapur do. ...		...	3,933	...	3,933	6		
		DISTRICT RESERVED FORESTS.								
Direction Division..	Ellichpur District ..	Ellichpur District ..	4,491	7	...	...	4,491	7		
	Amraoti do. ...	Amraoti do. .	26,268	41	...	...	26,268	41		
	Akola do. ..	Akola do. ..	56,185	88	(1) 59	(2) 7,612	48,632	76	(1) Area added in the formation of Pimpri Dhangar Reserve. (2) Transferred to State Forests — Loni ... 911 *Vide* (b); Bhongaon ... ... 1,368 *Vide* (c); Pimri Dhangar 5,333 *Vide* (a); Total ... 7,612	
	Buldana District	Buldana District ..	16,479	26	(3) 3	(4) 12	16,470	26	(3) Potkharab added. (4) Set apart for village requirements.	
	Wun do. ...	Wun do .	138,524	216	3,950	(6) 66,345	76,129	119	(6) Owing to formation of State Reserve. *Vide* (f) (7) Ramnas added.	
	Basim do. .	Basim do. .	30,720	48	(7) 1,026	(8) 6,578	25,168	39	(8) Owing to formation of State Reserve. *Vide* (d)	
		Total	886,795	1,386	138,131	133,105	891,821	1,394		

FORESTS.

ANNUAL FORM No. 49.—*Area of Unreserved Forests*, 1881-82.

Division or Range.	Civil district or territory.	Name of Forest.	Area on 1st April 1881.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1882.		Number and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		Unreserved Forests.								
Melghat Division ...	Ellichpur District...	Melghat Taluk ...	586,400	916	...	...	586,400	916		
		Ellichpur do. ...	5,815	9	...	...	5,815	9		
		Daryapur do. ...	1,591	3	...	...	1,591	3		
	Akola do. ...	Akot do. ...	1,460	2	...	...	1,460	2		
		Jalgaon do. ...	4,476	7	...	...	4,476	7		
Amraoti Range ...	Amraoti do. ...	Amraoti do. ...	4,048	6	...	...	4,048	6		
		Chandur do. ...	3,408	5	...	...	3,408	5		
		District Unreserved Forests.								
Direction Division ...	Ellichpur District ...	Ellichpur District ...	24,853	39	(a)5	...	24,858	39	(a) 4 acres—decrease in cultivation. one fifth acre—fractions of acres.	
	Amraoti do. ...	Amraoti do. ...	62,672	98	...	...	62,672	98		
	Akola do. ...	Akola do. ...	100,808	158	...	(b)18,498	82,310	129	(b) Increase in cultivation.	
	Buldana do. ...	Buldana do. ...	205,213	321	...	(c)1,141	204,072	319	(c) Increase in cultivation.	
	Wun do. ...	Wun do. ...	541,771	847	...	(d)43,920	497,851	778	(d) Increase of land under lease and cultivation.	
	Basim do. ...	Basim do. ...	294,011	459	(e)166,340	...	460,351	719	(e) Free grazing lands included.	
		Total ...	1 836,526	2,870	166,345	63,559	1,939,312	3,030		

FORESTS.

ANNUAL FORM No. 50.—*Area of Plantations*, 1881-82.

Division.	Name of plantation.	On 1st April 1881.		Added during 1881-82.		On 31st March 1882.		Remarks.
		Area.	Cost.	Area.	Cost.	Total area.	Total cost.	
	Bairagarh Reserve.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	
Melghat Division.	Pili	52	2,098	...	14	52	2,112	Teak.
	Rakiadoh	13	2,163	...	...	13	2,163	Teak and bamboos.
	Sembadoh	2	28	...	...	2	28	Do. do.
	Dugapati	11	435	...	...	11	435	Do. do.
	Pipalcota	160	5,083	...	...	160	5,083	Do. do.
	Saoli	110	4,860	...	...	110	4,860	Do. do.
	Bujru	31	2,259	...	...	31	2,259	Do. do.
	Labu	279	3,972	...	...	279	3,972	Teak.
	Saoli and Kurita ...	30	2,233	...	...	30	2,233	Do.
	Jambulwaree ...	600	4,325	...	...	600	4,325	Do.
	Abapur	120	5,072	..	...	120	5,072	Teak and bamboos.
	Kolkaz	1	687	...	135	1	822	Bamboos.
	Miscellaneous charges	...	...	...	132	...	132	
	Total ...	1,409	33,215	...	281	1,409	33,496	

FORM No. 51.—*Area of Forest tracts protected from fire during dry season*, 1882.

Division.	Forest tracts	Up to 30th June 1881.		During dry season of 1882.				Total cost up to 30th June 1882.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures	Actually protected.	Amount expended.			
		Acres.	Rs.	Acres.	Acres.	Acres.	Rs.	Rs.		
Melghat Division.	Melghat, Bairagarh Reserve, Raipur Block.	14,231	5,883	14,231	...	14,231	105	5,988	1870.	
	Remainder of Reserve ...	257,457	3,642	257,818	10,000	247,818	1,217	4,859	1872.	
	Gugamal Reserve ...	114,957	2,165	115,200	400	114,800	574	2,739	1877.	
	Chikalda Reserve ..	2,400	19	2,400	...	2,400	28	47	1880.	
	Total ...	389,045	11,709	389,649	10,400	379,249	1,924	13,633		
Amraoti Range.	Amraoti Hills Reserve ...	9,008	86	17,944	4,268	13,676	756	842	1881.	
South Berar Division.	Garumatergaon Reserve ..	44,692	2,391	45,992	1,850	44,142	478	2,869	1880.	
	Ghatbori Reserve ...	22,840	1,556	23,760	2,040	21,720	465	2,021	1881.	
	Penganga Reserve ...	10,125	1,378	11,575	...	11,575	200	1,578	1880.	
	Loni and Bhongaon Reserve.	...	.	2,279	...	2,279	...	...	1882.	
	Pimpri-Dhangar Reserve.	...	...	5,333	100	5,233	73	73	1882.	
	Rai Reserve	...	...	6,578	158	6,420	25	25	1882.	
	Total ...	77,657	5,325	95,517	4,148	91,369	1,241	6,566		
Wun Division.	Kinwat Reserve ...	51,752	2,037	52,558	640	51,918	377	2,414	1881.	
	Kelapur do. ...	28,216	448	40,747	26,667	14,080	254	702	1881.	
	Patroat do. ..	...	...	2,889	250	2,639	119	119	1882.	
		79,968	2,485	96,194	27,557	68,637	750	3,235		
	Total ...	555,678	19,605	599,304	46,373	552,931	4,671	24,276		

Charged in previous years ...	18,956
Do. do. 1881-82 ...	4,570
Do. do. 1882-83 ...	750
	24,276

FORESTS.

ANNUAL FORM No. 52.—*Prosecutions for breaches of Forest Rules during* 1881-82.

Forest Division and Civil District.	Cases pending from 188 -8	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Ellichpur District ...	...	...	27	...	...	27	27	18	18	9	14	27	32	...
Amraoti do. ...	...	...	17	1	1	19	19	14	17	5	12	19	29	...
Akola do. ...	...	...	12	...	4	16	16	9	18	7	8	16	26	...
Buldana do. ...	...	...	15	...	...	15	15	12	18	3	5	15	23	...
Basim do. ...	...	1	42	1	6	50	50	46	59	4	6	50	65	...
Wun do. ...	...	...	74	1	...	75	75	71	96	4	15	75	111	...
Melghat Division.														
Reserved Forests ...	...	3	2	...	...	5	5	5	22	...	6	5	28	...
Unreserved Forests	...	...	...	11	121	132	132	110	242	22	42	132	284	...
Amraoti Range ...	...	...	8	7	...	15	15	13	31	2	2	15	33	...
South Berar Division.														
Reserved Forests ...	...	...	5	...	3	8	8	6	8	2	11	8	19	...
Wun Division.														
Reserved Forests ...	...	1	6	...	...	7	7	5	9	2	10	7	19	...
Total ...	...	5	208	21	135	369	369	309	538	60	131	369	669	...

FORESTS.

ANNUAL FORM No. 53.—*Summary of Revenue of the different Divisions*, 1881-82.

Budget Heads—Receipts.	Direction Division	Amraoti Range	Melghat Division	South Berar Division.	Wun Division	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—*Timber and other produce removed from the forests by Government agency:—*						
a. Timber	...	...	3,586 2 0	..	...	3,586 2 0
b. Firewood and charcoal ...	...	...	...	...	...	...
c. Bamboos	...	...	43 8 0	...	...	43 8 0
d. Sandal-wood ..	...	...	...	...	...	...
e. Grass and other minor produce.	...	...	...	...	...	...
II.—*Timber and other produce removed from the forests by consumers or purchasers:—*						
a. Timber	4,489 3 3	554 13 3	51,697 7 11	...	526 8 0	57,268 0 5
b. Firewood and charcoal	6,278 14 6	2,030 9 3	7,564 6 0	78 12 0	5 1 0	15,957 10 9
c. Bamboos	399 4 0	...	16,489 9 6	28 8 0	303 8 0	17,220 13 6
d. Grazing and fodder grass ...	98,801 10 10	6,953 12 0	11,381 15 6	888 2 3	1,057 0 9	1,19,082 9 4
e. Other minor produce ...	13,987 3 11	52 11 0	3,275 8 0	...	...	17,315 6 11
III.—*Confiscated, drift and waif wood..*	2,069 4 10	5 4 0	70 3 6	3 0 0	2 0 0	2,149 12 4
IV.—*Revenue from forests not managed by Government:—*						
a. Duty on foreign timber and other forest produce ...	...	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...	...
V.—*Miscellaneous:—*						
a. Fines and forfeitures ..	5 10 6	...	...	...	...	5 10 6
b. Refunds	89 15 9	...	0 0 3		...	90 0 0
c. Other sources	847 8 1	...	74 6 0	173 13 5	...	1,095 11 6
Total Receipts .	1,26,968 11 8	9,597 1 6	94,183 2 8	1,172 3 8	1,894 1 9	2,33,815 5 3

Summary of Expenditure of the different Divisions, 1881-82.

BUDGET HEADS.—A.—Conservancy and Works	Direction Division.	Amraoti Range.	Melghat Division.	South Berar Division	Wun Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—*Timber and other produce removed from the forests by Government agency:—*						
a. Timber	...	...	283 15 9	...	...	283 15 9
b. Firewood and charcoal ...	...	...	...	...	...	...
c. Bamboos	...	...	...	...	...	...
d. Sandal-wood	...	...	...	...	...	...
e. Grass and other minor produce...	...	...	...	...	...	...
II.—*Timber and other produce removed from the forests by consumers or purchasers*	16,810 15 0	...	1,757 2 4	...	...	18,568 1 4
III.—*Confiscated, drift and waif wood..*	...	...	...	...	...	...
IV.—*Revenue from forests not managed by Government:—*						
a. Duty on foreign timber and other forest produce ...	...	...	..	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...	...
V.—*Rent of leased forests and payments to shareholders in forests managed by Government*	...	...	17,119 12 0	...	...	17,119 12 0
VI.—*Live stock, stores, tools and plant:—*						
a. Purchase of cattle... ...	3,000 0 0	...	...	...	...	3,000 0 0
b. Feed and keep of cattle ...	289 8 11	...	722 14 9	669 2 2	...	1,681 9 10
c. Stores, tool and plant ...	1,149 15 9	0 8 0	237 2 0	215 13 0	48 9 6	1,652 0 3
VII.—*Communications and buildings:—*						
a. Roads and bridges... ...	...	...	9,544 14 1	158 10 0	67 12 0	9,771 4 1
b. Buildings	233 3 2	152 6 0	871 15 0	135 0 0	140 0 0	1,532 8 2
c. Other works	20 10 9	13 13 0	243 6 9	...	...	277 14 6
VIII.—*Demarcation, improvement and extension of forests:—*						
a. Demarcation	...	133 2 0	285 11 0	489 14 9	1,047 4 3	1,956 0 0
b. Compensation for land and rights	...	225 0 0	..	3,811 6 9	...	4,036 6 9
c. Surveys and working-plans ...	...	...	1,484 13 1	..	...	1,484 13 1
d. Plantations	62 14 6	...	281 0 10	15 4 0	...	359 3 4
e. Protection from fire ...	.	560 13 9	1,922 8 6	1,330 13 2	755 12 4	4,569 15 9
f. Other works	746 14 4	...	254 15 0	...	...	1,001 13 4
IX.—*Miscellaneous—*						
a. Refunds	187 7 11	...	...	...	...	187 7 11
b. Law charges	...	.	...	...	...	...
c. Other charges	1,158 2 5	...	948 14 6	38 10 6	70 12 0	2,216 7 5
Total A.—Conservancy and Works ...	23,659 12 9	1,085 10 9	35,959 1 7	6,864 10 4	2,130 2 1	69,699 5 6

FORESTS.

ANNUAL FORM No. 53—*Summary of Expenditure of the different Divisions*, 1881-82.

Budget Heads. B.—Establishments.	Direction Division.	Amraoti Range.	Melghat Division.	South Berar Division.	Wun Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward, Total A.—Conservancy and Works	23,659 12 9	1,085 10 9	35,959 1 7	6,864 10 4	2,130 2 1	69,699 5 6
I.—Salaries—						
a. Conservators ...	9,662 9 1	...	...	...	...	9,662 9 1
b. Superior Officers ...	1,900 0 0	...	7,200 0 0	5,825 0 0	3,803 9 0	18,728 9 0
c. Subordinate Forest and Depôt Establishments	6,533 12 3	1,685 13 0	14,040 1 9	3,894 6 1	4,361 6 2	30,515 7 3
d. Office Establishments ...	3,426 5 0	...	3,715 14 5	1,260 5 4	1,079 13 8	9,482 6 5
e. Deputation and Special Allowances	...	...	89 0 6	...	..	89 0 6
II.—Travelling Allowances—						
a. Conservators ..	1,553 0 0	...	...	...	..	1,553 0 0
b. Superior Officers ...	570 0 0	...	1,620 6 0	1,240 4 0	991 12 0	4,422 6 0
c. Subordinate Forest and Depot Establishments ...	26 8 7	0 12 0	45 8 2	...	...	72 12 9
d. Office Establishments ...	241 0 0	...	314 8 0	314 5 1	235 8 4	1,105 5 5
III.—Contingencies—						
a. Stationery	157 13 0	2 8 0	61 15 3	21 10 0	98 7 3	342 5 6
b. Carriage of tents and records .	643 7 9	0 7 0	805 10 9	406 4 5	444 1 6	2,299 15 5
c. Rents, rates, and Taxes ..	502 4 7	...	399 15 11	...		902 4 6
d. Pay of Police Guards ...	...	...	..		...	...
e. Official postage	386 9 0	0 4 6	289 13 6	98 7 3	91 3 0	866 5 3
f. Sundries	1,378 5 8	9 5 (	415 2 3	97 15 1	50 5 1	1,951 1 1
Total B.—Establishments ...	26,981 10 11	1,699 1 6	28,998 0 6	13,158 9 3	11,156 2 0	81,993 8 2
Grand Total of Expenditure ..	50,641 7 8	2,784 12 3	64,957 2 1	20,023 3 7	13,286 4 1	1,51,692 13 8

ANNUAL FORM No. 62.—*Account of timber and other produce cut or collected by Government Agency and brought to sale depôts or sold locally during the year* 1881-82.

Particulars.	No. or quantity.	Cub. ft.	Total of each head. No. or quantity.	Total of each head. Cub. ft.	Particulars.	No. or quantity.	Cub. ft.	Total of each head No. or quantity.	Total of each head Cub. ft.
Balance at commencement of the year	...	...	...	..					
Received from the Forests in Depots.					*Removed by purchasers from Depots.*				
Teak logs	362	2,580			Teak logs	362	2,580		
Do. scantlings	2,930	5,698	3,292	8,278	Do. scantlings	863	1,591	1,225	4,171
Received from the Forests and sold locally.					*Sold locally.*				
Teak trees	894	7,532			Teak trees	894	7,532		
Do. logs	59	262			Do. logs	59	262		
Do. scantlings	458	583			Do. scantlings	458	583		
Tewas do.	2	3	1,413	8,380	Tewas. do	2	3	1,413	8,380
Bamboos	4,350	...	4,350	...	Bamboos...	4,350	...	4,350	...
					Balance at close of the year ...	...	...	...	...
					Melghat Division.				
					Teak scantlings	...	...	2,067	4,107
Total ...	...	...	9,055	16,658	Total ...	...	...	9,055	16,658

Extract from the Proceedings of the Resident at Hyderabad, in the Revenue Department, No. 2808-A, dated Hyderabad Residency, 30th October 1882.

Read—

The Report of the Conservator of Forests of the Hyderabad Assigned Districts for the year 1881-82.

RESOLUTION.

In the despatch* in which the Government of India reviewed the Forest Report for 1880-81, it was noted that "considering the peculiar climatic conditions of Berar, the proportion of reserves to the total area of the province is as yet very moderate," and the hope was expressed that "the work of transferring additional areas to the classes of State and District reserves will be steadily proceeded with."

* No. 174-F., dated 21st February 1882.

The present Report shows that the policy here indicated has been effectually followed. Fourteen new areas have been transferred from the class of District to that of State reserves, and although the total extent of these tracts is not very great—126 square miles—it is proper to remember that the labour involved in arranging for the transfer of a small area is almost as great as that connected with a large tract, and that, as the case of each of these 14 tracts was most carefully considered before orders sanctioning the transfer were issued, they represent a very considerable amount of work accomplished. With two exceptions, the new reserves have all been demarcated.

Putting the Melghat aside, Form No. 49 shows as follows:—

District.	Area of State reserves.	Area of District reserves.
Amraoti	78 ...	41
Akola	48 ...	76
Ellichpur	... ...	7
Buldana	72 ...	26
Basim	110 ...	39
Wun	169 ...	119
	477 ...	308

It would appear therefore that in several districts further transfers from the latter class to the former are both necessary and practicable, and that the remark made at the end of para. 1 of the Report, that it is unlikely that further transfers will take place to any large extent, seems to require explanation. The re-classification of the unreserved forests will not affect the question in any way.

2. The Government of India being unable* at present to increase the number of Forest Officers in Berar, the proposals which were sanctioned in the letter No. 170, dated 16th February 1881, still remain to be carried out. The proposal which the Conservator refers to in this para. is still under consideration. It seems to have been suggested by the circumstance that Mr. Rasul Khan's health disqualifies him for hard work in the Melghat, and although the Resident would be glad to see him put in charge of the Amraoti Hills, and ultimately of the Amraoti District, he is not sure that *as a permanent arrangement* it would be expedient to deprive the officer in charge of the Melghat Division of an assistant.

Para 3.—Forest charges.

* Letter No. 4021, dated 19th April 1882.

The Resident would express his entire concurrence in the proposal made by the Government of India in para. 6 of letter No. 174-F., dated 21st February 1882. The Commissioner is of opinion that the province is, compared with other provinces, somewhat over-officered. If superior Forest officers were appointed to each district this would, the Resident believes, clearly be the case.

In this connection the question whether it might not be possible to introduce one or more natives of Berar into the upper branch of the Forest Department is one that appears to deserve consideration, and which Mr. Jones hopes to take up. Natives do exceedingly well in the lower grades of the department, and he is inclined to think that their introduction into the upper grade would, besides being economical, be found to answer well.

Para. 4.

*From the Secretary to the Government of India, Home Department, No. 576, dated 1st July 1882.

3. The Forest Rules prepared by the Officiating Inspector General of Forests, and received under cover of the letter* quoted in the margin, have been referred to the Commissioner, Hyderabad Assigned Districts, for opinion. The delay which has occurred will not be found ultimately to have caused any real inconvenience, for the re-classification of District Forests now in progress would have necessitated very material changes in any draft that might have been drawn up.

4. The Resident is glad to be able to report that this most important work is making very satisfactory progress under Mr. Bagshawe. Rejecting, as not properly classifiable as forest land, all lands covered by village sites or assigned for village purposes other than free grazing, Mr. Bagshawe takes the free grazing land, the district reserved forests, the unreserved forests, of each village, and after inspection,

First—sets aside lands which he calls "woods," and which are intended for the production of babul or other wood.

Woods are usually quite small in area, since if they were large they would, in accordance with the policy referred to above, be transferred to the class of State Forests.

Second—selects in special localities "ramnas," *i. e.*, lands for the production of grass for civil stations and considerable towns.

Third—having ascertained the number of cattle in the taluk, sets aside as reserved from cultivation such part of the remaining area as he thinks necessary as the *permanent grazing grounds of the taluk.*

Fourth—declares the remainder to be available for cultivation.

The selection of woods and ramnas is a comparatively small and unimportant matter. The important thing is the reservation of grazing lands and the *placing a final limit on the spread of cultivation.* The matter is one in which the Revenue officer is as much interested as the Forest officer.

5. When Mr. Bagshawe has set aside grazing lands, he has next to consider the system under which grazing shall be permitted, and the amount of restriction that shall be placed on wood-cutting within them. The former is a difficult question, and its determination depends on the amount and distribution of the grazing lands. The latter is a comparatively simple matter. A few trees for fruit and shade are protected everywhere and certain timber trees *in a few villages.* All that remains is open to all. The result will be that Deputy Commissioners, abandoning the inconvenient fiction that every field in Berar contains wood or timber worth preserving, will be enabled to introduce a really effective system of control in the few villages in which there is something to cut.

Mr. Bagshawe's reports on the taluks which he has completed have been carefully examined by the Resident. When the work has progressed a little further an *ad interim* report will be submitted for the information of the Government of India.

Para. 8.

6. It might be supposed from this para. that no more roads are to be constructed in the Melghat by the Public Works Department, but what Mr. Drysdale really means to say is that the road which has been actually under construction has been completed; other important roads are projected and will, it is believed, be com-

menced this year. The Conservator has not stated what progress has been made with the road beyond Pili towards Burhanpur, which Mr. Ballantyne was to have constructed, or at least improved. The extension of the Morsi road to Buroor will help to develop communication between the north-east of Berar and the Nurbudda Valley.

Para. 10, last sentence.

7. The proposals here referred to were carefully considered by the Resident, and the decision at which he arrived was that head loads of grass exported from the Melghat should certainly not be taxed; that rates in force in the Amraoti Hills would not necessarily be suitable in a remote tract like the Melghat; and that grazing rates should not at present be raised. Rates in Wun were slightly raised so as to bring them into accord with those in the Melghat. When the re-classification of forests in this district is complete, it may be expedient to raise them again, and bring them up to the level of the rates in force in the Amraoti Hills.

Para. 12.

8 The papers submitted in connection with the formation of the Jiri reserve made it clear that one-half at least of the area which it was originally proposed to take up would have to be excluded from the reserve, and made it doubtful whether the second half should be taken up The Conservator, moreover, expressed an opinion that a reserve at Jiri would be of very little use. Under these circumstances, it has been suggested to the Conservator that he should still further reduce the area which he asked to be allowed to take up. A reserve on the southern slope of the Melghat range would be an interesting experiment, but a long unbroken belt of State forest, skirting the foot of these hills, and separating the people of the plains from the accustomed grazing grounds, would produce very great inconvenience and hardship.

Paras. 13—16.

9. Although protection was somewhat less complete than in former years, the injury done by fires was after all but small, and as they were in several cases caused by lightning, there is no reason to suspect diminished vigilance on the part of the Forest staff. The account which the Conservator gives of the effects of fire conservancy in multiplying insects inimical to tree life is curious and important. The subject should be referred to in future reports.

Paras. 19 and 20.

10. The progress made in road-making in the Melghat is satisfactory, but it is noted that the cost of repairs to the Raipur road was considerable. A project for a road from Ellichpur to Chikalda *via* Damangaon is being matured in the Public Works Department.

Para. 22.

11. The proposals referred to in the last part of this para. were submitted by the Commissioner, but did not appear materially to alter the position in which the question of making a new survey of the Melghat now stands. The Government of India has ruled that so far as regards Forest administration, a new survey is not needed, and pending the receipt of the report which the Commissioner has been asked to furnish in March next, the best thing that the local authorities can do is to *settle and demarcate the boundaries of villages.* Whatever decision is come to, this work must be undertaken. There has been more than enough writing about this survey. What is now needed is that the operation which will render its commencement (should it be decided upon) feasible should be carried through.

Para. 24.

12. The Conservator has not examined the causes which have led to the very serious result which he here mentions with the fulness which its importance deserved. A report on the matter will be called for. It is not a little disappointing to find that just when the completion of the Pili road renders the principal forests of Berar accessible, their produce should be unsaleable.

Paras. 26—29.

13. It is satisfactory to find that the Amraoti Hills reserve is now being worked on a regular system, but mistakes have evidently been made, and the financial results attained have not been so far satisfactory. It is believed that when the reserve was in

the hands of the Deputy Commissioners a far larger revenue was realized. Diminution of revenue is of importance both in itself and as indicating that the reserve is not resorted to by the classes for whose benefit it was established as much as could be desired. Regarding this matter also a report will be called for.

Vide Statement, para. 53.

14. The increase in the area protected from fire is satisfactory, but the Resident notices with regret that incendiary fires still occur, and that the number of cattle pounded in the two chief reserves is still large. The two things may not be unconnected.

Paras. 31—39, South Berar Division.

Expenditure in this division was nearly ten times the amount realized as income. It is not stated what the condition of the various reserves now is.

15. Regarding the Wun Division much the same remarks have to be made. The Kelapur and Ghat Bori reserves have from the first given trouble, and the reason has been that the convenience of the people was not sufficiently consulted in the first instance. Large concessions have since been made, but the Conservator should not rest until the people round these reserves are as much on the side of this department as those of the Melghat are. It is not understood why (*vide* para 38) the income from bamboos from the Kinwat Reserve has fallen off.

Paras. 40—48.

The progress that has been made in completing the scheme of State Reserves in this division is decidedly good.

16. The figures given in para. 53 appear to indicate that the system on which District Reserves are administered fails at all events to secure much financial advantage; but as these areas will come under the re-classification now in progress, it seems unnecessary to enquire at present whether the system is susceptible of improvement.

Paras. 50—53.

17. The success which has attended the effort of the Department to repress dhya cultivation is satisfactory.

Paras. 54—60.

As in the State Reserves so here, there has been a falling off in timber exports, and besides this the number of bamboos exported has declined by one-third. The explanation given is not as complete as might be wished.

The prohibitive tax on "bullies" was agreed to by the Commissioner somewhat unwillingly in deference to the opinion of the Officiating Conservator, Mr. Bagshawe, but unless there is a strong case for removing the prohibition, it had better, the Resident thinks, remain in force for some little time longer.

The decrease in income from grazing is not matter for regret, since the large receipts of the previous year were simply the result of the scarcity of grass in the plain taluks of Berar.

The Conservator has not referred to the scheme for providing tanks where cattle sent to the Melghat may drink. The pastures of these hills are immense, but as cattle cannot be driven far from water, the amount of land practically available for grazing is very much curtailed.

18. As Mr. Drysdale remarks, figures connected with unreserved forests, though in some respects the most important of all, have little interest at present.

Paras. 61—64.

19. The Resident is glad to acknowledge the care which, during the past 18 months, has been bestowed on the preparation of maps on a convenient scale. Colonel Menzies, when Deputy Commissioner of Amraoti, led the way with a map of the Amraoti Hills, which has become the model on which other maps have been drawn.

Para 65.

20. Altogether, although considerable progress has been made in augmenting the area of the Berar State Forests, and the re-classification of District Forests has been started; as Mr. Jones believes, in a thoroughly satisfactory manner, the results of the year have been somewhat disappointing, and the Report fails in several instances to show why they have been so.

21. In para. 8 of his Review the Commissioner remarks that babul buns have not hitherto been utilized as they should have been. The fact, however, is that no one has yet been able to suggest any plan by which small *village* buns shall be made available to the people; and the conclusion to which Mr. Jones has been led is that it would be better to have a few large buns than many small ones, which, though nominally intended for the benefit of the people of the village in which they are situated, cannot in practice be made specially useful to them. But the matter is one which deserves further consideration.

(By order,)

G. H. TREVOR,

Secretary for Berar.

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No. 4572 of 1883.

From

S. O. B. RIDSDALE, Esq., C. S.,

Commissioner,

Hyderabad Assigned Districts,

To

The SECRETARY for BERAR to the RESIDENT,

Hyderabad.

Dated Amraoti, *the 6th September* 1883.

Sir,

I have but few comments to add in forwarding the Annual Forest Report for the province, which reached me on the 27th ultimo.

2. It will be observed with satisfaction that the general financial result of the operations of the Department exhibits a considerable improvement over that of the preceding year, on which, as showing a tendency to decline, the Government of India commented unfavourably in reviewing last year's Report. The surplus this year, Rs. 1,37,068, is an advance of Rs. 56,542 above that of last year, and very nearly equals the surplus of 1880-81.

3. It is the more satisfactory to note that out of this increased profit of Rs. 56,542 the larger portion, amounting to Rs. 38,065, is derived from the improved working and opening out of the Melghat reserved forests, which are in fact the only real timber forests in Berar.

The other main source of increase, the auction sale of grass in the district unreserved forests, is of a more variable nature, and under the new proposals for the re-classification of these areas, and the substitution of grazing dues, will probably suffer considerable diminution.

4. The increase in the yield from the Melghat forests of timber and other produce removed by purchasers from Rs. 7,827 in last year, to Rs. 17,665 during the year now reported on, is remarkable, while at the same time there seems every hope that each succeeding year may bring a further advance in these transactions as more roads are opened out and the forests become more accessible. The resulting benefit to the Kurkus in the regular employment afforded to them and in the money they obtain for the produce they work out, is of the utmost importance, and is already highly appreciated by them.

In addition to the profits from the reserves, the unreserved forests in the Melghat have also shown a considerable increase in income, amounting to nearly Rs. 20,000.

5. Important work has been done by the Department in these forests during the past year in the way of road construction and improvement, and it is to be hoped that the further extension of feeder roads, the construction of which is contemplated in the current year, will be carried out as proposed.

6. A thorough examination has also been made of this tract with the view to discover and select suitable sites for storage reservoirs for water, which, if money can be found for their completion, will immensely enhance the grazing capabilities of these hills.

7. In protecting the reserves from fire the efforts of the Forest establishment have been eminently successful this year, and the result is very creditable, though due, no doubt, partly to good fortune as well as to good management.

Out of a total area of 661,889 acres in which the exclusion of fire was attempted, complete protection was attained in 622,640 acres.

8. There is little to be noted in regard to the management of the reserved forests in the plains districts. Some extensions have been made in planting babul trees in suitable tracts, and for the rest the principal work appears to have been the exclusion of fire and the sale of grass and other minor products.

9. The district unreserved forests, or rather waste lands, have remained as before under the control and management of the district authorities, and show an increase in revenue of nearly Rs. 26,000 during the past year.

10. The questions of the introduction of the new forest rules, the re-distribution of forest charges in subordination to the district authorities, and the re-classification of district wastes, are all the subjects of separate correspondence now under consideration, and do not need discussion here.

Proposals in regard to the latter scheme, the re-classification of the district wastes, have already been submitted for the districts of Ellichpur, Amraoti, and Wun, and for two out of the three taluks of the Basim District. The work for the remainder of the province will be completed during the current year.

I have the honour to be,

Sir,

Your most obedient Servant,

S. O. B. RIDSDALE,

Commissioner,

Hyderabad Assigned Districts.

No. 333 of 1883-84.

From

A. T. DRYSDALE, Esquire,

Conservator of Forests,

Hyderabad Assigned Districts,

To

The COMMISSIONER,

Hyderabad Assigned Districts.

Dated Amraoti, 30*th July* 1883.

Sir,

I have the honour to submit the Progress Report of Forest Administration in the Hyderabad Assigned Districts for the year 1882-83.

CHAPTER I.—General Summary.

1.—*Area and Boundaries.*

Forest area of the province.

1. The changes that have taken place during the year in the classification of the forest area of the province are exhibited in the subjoined statement;—

Description of forest.	Area in square miles.				Percentage of forest area to area of province	
	On 1st April 1882.	Added during the year exclusive of inter-divisional transfers.	Excluded and transferred during the year exclusive of inter-divisional transfers.	On 31st March 1883.	On 31st March 1882.	On 31st March 1883.
State Reserves	1,086	22	2	1,106	6·7	6·8
District do.	308	3	28	283	1·9	1·7
Do. Unreserves	3,030	17	92	2,955	18·8	18·3
Total ...	4,424	42	122	4,344	27·5	27·0

The increase in State Forests is due chiefly to the formation of the Amdari Reserve with an area of 13,717 acres, whilst the decrease is owing for the most part to errors that have been discovered in the detailed or field area statements. The differences against District Reserves may be similarly accounted for. Variations in the area under cultivation are the main cause of the changes in Unreserved Forests.

Compared with last year, the percentage of the different classes of forest to the area of the province shows an increase of ·1 in State Reserves, a decrease of ·2 in District Reserves, and a decrease of ·5 in Unreserved Forests.

Boundary lines and marks.

2. The two reserves remaining undemarcated at the close of 1881-82, *viz.*, Gondwakri and Korad in the Wun Division, and also the recently formed Amdari Reserve in the South Berar Division, have been demarcated during the past season, and the boundary lines and pillars of other reserves maintained in good order.

Distribution of forest area into forest charges.

3. Sanction has lately been received to the proposal made in my letter No. 196, dated 26th June 1882, for the formation of the Amraoti District into a separate forest division, and the appointment of Mr. Rasul Khan, Sub-Assistant Conservator, to the charge of it; but orders have not yet been passed on the recommendations made in my letter No. 465, dated 31st October 1882, and subsequent correspondence, for giving effect to the scheme sketched in paras. 4 to 10 of the review by the Inspector General of Forests on Forest Administration in the several provinces under the Government of India for 1880-81. Under this scheme forest divisions are to be made coterminous with districts, and divisional officers placed in subordination to Deputy Commissioners, who are to have full executive power in all forest matters relating to their districts, the functions of the Conservator in regard to current work being confined to advice, whilst the control of the departmental finance and organization will rest entirely with him.

To give proper effect to the scheme the appointment of three more officers, of not lower rank than Sub-Assistant Conservator, will be required, one for each of the two additional divisions that will be formed, and the third to be a supernumerary to fill any vacancy caused by sickness or otherwise, and to be employed in the meantime in whatever division his services can best be utilized.

2.—*Protection and Improvement.*

New forest rules

4. The Government of India in their letter in the Home Department—Forests, to the Resident, No. 756-F, dated the 1st July 1882, rejected the code of Forest Rules for Berar prepared by Mr. Baden Powell, as it contained the fundamental forest law and the local rules all in one document, and a considerable quantity of detail had therefore been introduced which might require to be changed afterwards, and thus necessitate frequent references to the Government of Indian. They at the same time forwarded for opinion a revised draft regulation prepared by the Inspector General of Forests consisting of the Indian Forest Act of 1878, modified to suit the requirements of Berar. This regulation was circulated to Deputy Commissioners and others for criticism, and with slight alterations was generally approved of. I trust therefore it may soon receive sanction, as the present rules are in many respects unsuitable, and are greatly in want of revision.

Details of establishment.

5. The superior staff on the 1st April 1883 consisted of:—

1 Conservator; 2 Officiating Deputy Conservators; 1 Assistant Conservator; 1 Sub-Assistant Conservator.

The subordinate establishment comprised:—

7 Rangers; 65 Foresters; 115 Guards.

The monthly maximum amount sanctioned for subordinate establishments was increased during the year from Rs. 3,296 to Rs. 3,375, by a slight addition being made to the pay of the Melghat naka karkuns on the withdrawal of the grant formerly enjoyed by them of a small percentage on their revenue collections.

Prosecutions for breaches of Forest Rules

6. The following statement shows the prosecutions made under the Forest Rules:—

	1881-82.		1882-83.	
	Cases.	Convictions.	Cases.	Convictions.
State reserves ...	35 ...	29 ...	59 ...	39
Unreserved forests included in forest divisions ...	132 ...	110 ...	137 ...	122
District forests ...	202 ...	170 ...	241 ...	202
Total ...	369 ...	309 ...	437 ...	363

The figures call for no particular remark. Compared with last year there has been a small increase of 68 in the number of cases, whilst the percentage of convictions remains about the same.

Protection of reserves from fire.

7. Subjoined is a comparative statement of areas protected from fire :—

	Area of reserves attempted to be protected in 1882	Area of reserves actually protected in 1882.	Area of reserves attempted to be protected in 1883	Area of reserves actually protected in 1883.
Melghat Division	389,649	379,249	389,649	389,649
Amraoti Range	17,944	13,676	17,944	15,585
South Berar Division	95,517	91,369	95,725	89,006
Wun Division	96,194	68,637	158,571	128,400
Total ...	599,304	552,931	661,889	622,640

The area attempted to be protected during 1883 was greater by 62,585 acres than in 1882, whilst the area actually protected exceeded that of the previous year by 69,709. The cost of fire conservancy was only Rs. 485 more than in 1882.

Creeper cutting in the Melghat Division.

8. The following progress has been made in creeper cutting in the Melghat Division, the only division where such work is required to be done :—

	Area cleared. Sq. miles.	Cost. Rs.
Bairagarh Reserve ...	58 ...	454
Gugamal Reserve ...	6 ...	75
Total ...	64 ..	529

Construction of roads.

9. In the Bairagarh Reserve 11 miles of road have been constructed departmentally at a cost of Rs. 5,211. In the Gugamal Reserve the Chikalda-Bandam road has been widened and repaired at an expenditure of Rs. 1,736.

Petty repairs to existing roads have also been made in the reserves of the South Berar and Wun Divisions.

Construction of tanks.

10. Of the tanks proposed to be constructed in the grazing tracts of the Melghat and Amraoti Hills to store water for cattle against years of drought, two have already been commenced, one at Dhamangaon in the Melghat Hills, and the other at Hirgohan in the Amraoti Hills. The estimated cost of the former is Rs. 14,144, and of the latter Rs. 16,703. Both tanks will probably be completed by the end of October next. The work is being carried out by the Public Works Department.

Plantations.

11. No extension has been made to the regular plantations, but cultural operations have been carried on in the following areas :—

Division.	Reserve.	Area acres.
South Berar ...	Loni	250
Do. ...	Bhongaon ...	347
Direction ...	Amraoti Hills ...	303
Do. ...	Karanja Nursery ...	1
	Total ...	901

These areas represent blanks formerly under cultivation, and the method adopted for re-stocking them consisted of ploughing strips about three feet in width at 15 feet distances, and sowing them either with babul, sounder (*prosopis spicigera*) or tewas according to the nature of the soil, the intervening spaces being

sown broad-cast. About 8,000 lbs. of teak seed were also sown broad-cast as an experimental measure in June 1882 on the northern slopes of the Gugamal Hill. The result will be reported next year.

Buildings.

12. Seven new thanas have been constructed and repairs made to the rest-houses at Chikalda and Makhla.

Survey operations.

13. The subjoined statement exhibits the amount of survey work accomplished during the year by the Forest Survey Department:—

Division.	Length of boundary line, miles.	Length of roads, miles.	Topography, square miles.
Melghat ...	... 180	... 65	... 7
South Berar ...	... 178	... 11	... 54
Total	... 358	... 76	... 61

Re-classification of district forests.

14. Of the 21 taluks into which Berar, excluding the Melghat, is divided, the district forests of 12 have been re-classified. The details of the classification, and also the areas in the other taluks remaining to be classified, are shown in Appendix I.

Sanction has been received to the classification proposed for the Yeotmal, Morsi, Ellichpur and Daryapur taluks. The schemes for the remaining taluks are before the Resident.

It is hoped that the nine taluks that have yet to be classified will be completed by the end of March 1884, and the forest area of the province will then have been permanently fixed. The areas classed as woods, grass lands, and grazing lands will, like State forests, be reserved from cultivation, and the only areas liable to variation will be the "open forests," which are meant for the extension of cultivation.

3.—*Yield and Working.*

Yield and working.

15. The yield of the State reserves and unreserves directly under Forest Officers is given in Appendices E. and G.

Compared with last year there has been a large increase in each division in the yield of the chief articles of forest produce, attributable partly to a brisker demand brought about by the forests being made more accessible through the construction of good roads, and partly to special efforts made by Divisional Officers to raise up a market for their produce.

Timber returns.

16. Excepting Forms Nos. 58 and 63, no timber returns are attached to this Report, as no depôts are maintained. All felling in State Forests is done departmentally; but the trees are sold by auction as they fall, and are cut up and removed by the purchasers. Form No. 58 shows the number of trees felled, and Appendices E. and G. and Form No. 63 the produce removed.

The entries under Revenue head I. and expenditure head A-I in Form No. 53 ought, properly speaking, to have been made under revenue head II. and expenditure head A.-II. respectively, and steps have been taken to secure a more correct classification in future.

The District reserves and unreserves in charge of civil officers are being re-classified. For this reason, and also because most of the produce of these forests is exported free of duty, it is not possible to ascertain their yield.

4.—*Financial Results.*

Financial results.

17. The subjoined statement exhibits the financial results of the year :—

		Revenue.	Expenditure.	Surplus.	Deficit.
		Rs.	Rs.	Rs.	Rs.
Direction...	Direction office..	14	30,759	...	30,745
	District Reserved Forests ...	8,296	3,384	4,912	...
	Do. Unreserved Forests ...	1,34,273	11,171	1,23,102	...
	Amraoti Range State Reserve ...	12,944	2,311	10,633	...
Melghat Division.	Divisional office..	365	15,847	...	15,482
	State Reserves...	23,023	23,792	...	769
	Unreserved Forests	1,02,321	28,073	74,248	...
South Berar Division.	Divisional office..	...	11,167	...	11,167
	State Reserves	3,498	6,827	...	3,329
Wun Division.	Divisional office..	2	9,320	...	9,318
	State Reserves	2,307	7,324	...	5,017
	Total ...	2,87,043	1,49,975	2,12,895	75,827
	Deduct deficit ...			75,827	
	Net Surplus ..			1,37,068	

The revenue was realised in about equal proportions, by forest and civil officers, the figures being :—

	Rs.
Forest Officers ...	...1,44,474
Civil do. ...	...1,42,569
Total	...2,87,043

If the receipts and charges of the direction and divisional offices be equally divided amongst them, the revenue and expenditure of the different classes of forest stand thus :—

Class of Forest.	Revenue.		Expenditure.		Surplus.		Deficit.	
	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83	1881-82	1882-83
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
State Reserves ...	24,075	41,899	65,543	62,618	...	...	41,468	20,719
District do. ...	8,573	8,423	29,983	25,748	...	...	21,410	17,325
Unreserved Forests	2,01,167	2,36,721	56,167	61,609	1,45,000	1,75,112	...	...
Total ...	2,33,815	2,87,043	1,51,693	1,49,975	1,45,000	1,75,112	62,878	38,044
Deduct deficit ...					62,878	38,044		
Net surplus ...					82,122	1,37,068		

Compared with last year there has been an increase in revenue of Rs. 53,53.. and a decrease in expenditure of Rs. 3,010.

The following are the revenue heads under which most of the increase has taken place :—

Revenue head.	Increase. Rs.	Cause of increase.
I-*a*. ...	1,506 ...	A better demand for timber from the Bairagarh Reserve.
II-*a*. ...	18,193 ...	A large export of timber from the unreserved forests of the Melghat.
II-*b*. ...	4,589 ...	A larger export of firewood from the unreserved forests of the Melghat.
II-*c*. ..	13,777 ...	Increased sales of bamboos from the Bairagarh and Gugamal Reserves in consequence of the completion of the Pili road and of several important feeders to it.
II-*d*. ...	12,937 ...	Increased revenue from auction sales of grass in District Forests.
II-*e*. ...	2,243 ...	Increased revenue from auction sales of fruit in District Forests.
Total ...	53,245	

The decrease in expenditure is small, and calls for no particular remark.

Transactions of the year exhibited under main heads of revenue and expenditure.

18. The receipts and charges of the year are exhibited under main budget heads in the subjoined statement :—

Heads.	Receipts.		Charges.	
		Rs.		Rs.
I. Departmental timber operations	I.	5,117	I.	678
II. Other revenue ...	II., III., V.,	2,81,926	II., III., V., IX., 75% VI. and B.	1,02,686
III. Formation, protection, and improvement of forests	...	...	VII., VIII., 25% VI. and B.	46,611
	Total ...	2,87,043		1,49,975

Unfavourable balance sheets of years 1879-80 and 1880-81 explained.

19. In para. 8 of their review of the Report for 1881-82, the Government of India desired me to give an explanation in the report for this year of the unfavourable balance sheets of the years 1879-80 and 1880-81. For the sake of comparison I give below a statement of the revenue and expenditure of the department for the last five years :—

Year.	Receipts.	Charges.	Surplus.
1878-79 ...	2,88,701 ...	1,06,940 ...	1,81,761
1879-80 ...	3,07,501 ...	1,10,208 ...	1,97,293
1880-81 ...	2,66,556 ...	1,28,969 ...	1,37,587
1881-82 ...	2,33,511 ...	1,52,985 ...	80,526
1882-83 ...	2,87,043 ...	1,49,975 ...	1,37,068

The favourable balance sheet of 1879-80, in which year the surplus was greater than it had ever been before, is accounted for by the abandonment of about one-half of the Gugamal Reserve, and its inclusion in the unreserved forests of the Melghat. There was then a rush made upon all the more valuable descriptions of wood and other produce contained in it, and a consequent sudden rise in revenue.

In the following year there was a decrease in revenue of Rs. 40,945, and an

increase in expenditure of Rs. 18,761. The revenue heads under which most of the decrease took place were—

Revenue head.	Decrease. Rs.	Cause of decrease.
II.-*a*. ...	32,923 ...	The more valuable descriptions of forest produce had been extracted from the portion of the Gugamal Reserve thrown up. There was also less demand for all descriptions of produce in consequence of a partial failure of the crops, and the inability therefore of the cultivators to afford extensive purchases.
II.-*d*. ...	4,541 ...	Decreased revenue from auction sales of grass in District Forests. The crop of grass was very poor owing to a light fall of rain.
II.-*e*. ...	2,014 ...	Decreased revenue from auction sales of fruit in District Forests.
Total ...	39,478	

The expenditure heads under which most of the increase took place were—

Expenditure Head.	Increase. Rs.	Cause of increase.
A.-II. ...	11,345 ...	Fees to patels and patwaris for collection of forest revenue were paid from the budget grant instead of as formerly from the collections.
A.-VII.-*a*. ...	4,496 ...	Increased expenditure on the construction of roads in the Melghat reserves.
A.-IX.-*a*. ...	1,643 ...	Refund of grazing revenue on account of partial failure of the rains.
Total...	17,484	

In 1881-82 there was a decrease in revenue of Rs. 33,045, and an increase in expenditure of Rs. 24,016. The revenue heads under which most of the decrease took place were—

Revenue Head.	Decrease. Rs.	Cause of decrease.
II.-*a*. ...	11,985 ...	A prohibitive tax was placed on teak ballees exported from the Melghat unreserved forests, and consequently no wood of this description was cut.
II.-*d*. ...	22,597 ...	Decreased revenue from auction sales of grass in district forests. The rain-fall was particularly favorable, and there was abundance of grass on private lands outside district forests. The year in which the highest revenue from these auction sales is obtained is one in which there is only a moderate fall of rain, and the population is then almost wholly dependent upon the district forests for grass and grazing.
Total ...	34,582	

The expenditure heads under which most of the increase took place were:—

Expenditure Head.	Increase. Rs.	Cause of increase.
A.-II. ...	2,756 ...	Arrear payments of percentages to patels and patwaris for collection of forest revenue.
A.VI.-*a*. ...	3,000 ...	Purchase of elephant for Conservator.
A.-VI.-*c*. ...	1,079 ...	Purchase of tools for road making in Melghat reserves.

Expenditure Head.	Increase. Rs.	Cause of increase
A.-VII.-*a*. ...	1,239	... Construction of roads in Melghat reserves.
A.-VIII.-*b*. ...	4,036	... Compensation for land resumed in the formation of additional reserves.
A.-VIII-*c*. ...	1,891	... Survey operations in the Melghat Reserves.
B.-I-*a*. ...	1,135	... Increased pay of Conservator.
B.-I-*b*. ...	3,690	... Pay of additional Deputy Conservator retained on special duty.
B.-I.-*d*. ...	2,093	... Pay of office establishment for officer on special duty.
B.-II. ...	1,060	... Travelling allowance of officer on special duty, and of his office establishment.
B.-III. ...	1,974	... Contingencies connected with office of officer on special duty.
Total ...	23,953	

CHAPTER II.—Reserved Forests.

(*a*).—DEMARCATED STATE FORESTS.

A.—Melghat Division.

I.—*Area and Boundaries.*

Demarcation of black soil villages.

20. The demarcation of the following permanent black soil villages which have been selected in the Gugamal Reserve has been completed at a cost of Rs. 145-14:—

1. Arao.	3. Dakna.
2. Bandam.	4. Koha.

Abandonment of proposed Anjan reserve at Jiri.

21. The suggestion made by me for abandoning the western portion of the proposed Jiri reserve and only retaining the area situated to the east of the Ban river, was rejected by the Resident in memo. forwarded with his Secretary's letter No. 2754, dated 24th October 1882, as he considered the reservation of this area even would inflict severe hardship in the matter of grazing on the adjoining villages. The Resident was favourable to the taking up of a still smaller area, if such could be done without inconveniencing any particular village; but in my letter No. 627, dated 27th December 1882, I pointed out that little advantage was to be gained from the reservation of so small an area as this would entail, and suggested that, if the reduced area originally selected could not be sanctioned, the idea of forming an Anjan reserve at the foot of the Melghat Hills should be given up altogether.

2—*Protection and Improvement.*

Prosecutions for breaches of Forest rules.

22. Twelve cases occurred, in all of which convictions were obtained. Nine of the cases were for unauthorised felling of wood, and of the remaining three, two were for carrying fire, and one for shooting.

Fire protection.

23. The following statement shows the areas protected from fire:—

Reserve.	Protected. 1882.	Protected. 1883.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
Bairagarh	262,049	272,049	10,000	...
Gugamal	114,800	115,200	400	...
Chikalda	2,400	2,400	...	...
Total ...	379,249	389,649	10,400	...

Compared with last year there is an increase in area of 10,400 acres, whilst the total expenditure has decreased by Rs. 58. The success that has been attained this year is unprecedented, the entire area of the reserves having been protected.

Of late years, although no very injurious fires have occurred, and only small areas have been burnt, there have always been a few accidental fires; and this is hardly to be wondered at, considering the extensive areas of the reserves. The wonderful success of fire conservancy in the Melghat is due more than anything else to the happy relations established between the Forest Department and the inhabitants of this tract, for which the credit belongs wholly to Mr. Ballantyne, the divisional officer, who has at considerable sacrifice of health lived almost entirely in the Melghat Hills for the last fifteen years.

The reserves are, of course, divided by fire lines into numerous blocks and special establishments entertained for their protection: but no amount of fire lines and establishments will insure the safety of forests, so long as the people living within them or their vicinity are unhappy or discontented.

There have been special difficulties, too, in connection with fire conservancy in the Melghat, as the reserves there are the only ones in Berar that are being, comparatively speaking, extensively worked, and that consequently have people wandering about them for the greater portion of the year.

Although in the Report for 1881-82, when alluding to the beneficial effects of fire conservancy, I noted also a few of the present existing evils, I did not for a moment wish it to be inferred that I considered the benefits were in a measure counterbalanced by these evils. The increase in insect life I look upon as merely temporary, for doubtless there will be a simultaneous increase in the enemies of the insects. At present, however, the insects appear to have somewhat the advantage. No one who recollects the appearance of the Bairagarh reserve some fourteen or fifteen years ago, when it was annually devastated by fire, and when, except in the valleys, there was little soil on the ground and no seedlings, and who now sees it with re-production spreading apace on all sides and an annually improving forest soil, can doubt an instant the benefits of fire conservancy.

Steps are being taken to catch, with a view to identification, the larvæ of the insect that was reported last year to be doing considerable injury to teak seedlings.

Creeper cutting.

24. Creepers have been cut over the whole of compartments Nos. 16, 23, 24 and 26, and over portions of compartments Nos. 1, 2, 3, 4 and 12 of the Bairagarh Reserve, also over an area of about six square miles of the Gugamal Reserve, at an expenditure in the aggregate of Rs. 529.

Roads constructed by Public Works Department.

25. The Ellichpur-Pili and the Gattang-Chikalda roads having been completed, the Executive Engineer has furnished me with the following particulars of length and cost, which I consider it desirable to place on record.

The Pili road from the post office at Ellichpur to the forest thana at Pili has a length of exactly 32 miles, and has cost altogether Rs. 3,22,791, or Rs. 10,087 per mile. It is a second-class road. The maintenance charges last year amounted to Rs. 5,775, or Rs. 180 per mile.

The Gattang-Chikalda road that branches off at the 16th mile of the Pili road is 13 miles 5 furlongs long, and cost Rs. 17,625, or Rs. 1,293 per mile. It is a 3rd class road. The maintenance charges last year amounted to Rs. 1,850, or Rs. 135 per mile.

The completion of these roads is accountable in a great measure for the large increase this year in the revenue of the Bairagarh and Gugamal reserves. People from the plains are now commencing to use the roads freely, and I hope that ere long the dread of the climate of the Melghat will have no influence in preventing the cultivating classes of the plains from entering the hills and purchasing wood and other produce in the forests themselves. Timber cutting and such like work must necessarily be done by the hill people, who are, as it were, born and bred to it; but it would be of great advantage if they could be relieved of the transport of forest produce, and be utilised solely in work in the forests.

Additional roads proposed to be constructed by Public Works Department.

26. In the Public Works forecast proposals have been made for the construction of three additional main lines of road, and it is to be hoped that all three may be sanctioned, and an early commencement made to them. The roads are:—

1st.—From Ellichpur to Chikalda to meet the forest road already made from Chikalda to Bandam, and so tap the Gugamal Reserve towards the east.

2nd.—From Akot *via* Kasod, Dargar, Moandra, and Jambu to Malur to tap the Gugamal Reserve on the west.

3rd.—From Jiri *via* Deulghat to Amnair to tap the richest portion of the unreserved forests, and the highly cultivated lands in the valley of the Taptee.

The roads are entered above in what I consider their order of importance.

Plans and estimates have, I believe, already been prepared for the Ellichpur-Chikalda road, and for a portion of the Jiri-Amnair road, but no steps have yet been taken towards the commencement of the Akot-Malur road.

All main lines of road leading into the plains should, I consider, be constructed by the Public Works Department, as the cheaper roads of the Forest Department would not bear the traffic there will be on such lines. The efforts of the Forest Department in road-making should be confined solely to the construction of feeders to the main lines, and these, in consequence of local influence and the power to procure labour readily among the hill tribes, the Forest Department is perhaps in a position to make cheaper and more expeditiously than the Public Works Department.

The main lines, which will have a total length of about 130 miles, will require some three or four hundred miles of feeders before the Melghat can be considered fully opened out.

Roads constructed by Forest Department.

27. The following progress has been made in the construction of roads by the Forest Department.

Bairagarh Reserve.

Last year the Sembadoh-Biba road was reported as completed to within two miles of Hatru. This year it has been extended as far as the Kandu River, four miles beyond Hatru, at a cost of Rs. 1,527, and it is expected to be opened to Biba itself by the end of next cold weather. The total length of this feeder will be about 30 miles. The last five miles of the Sembadoh-Makhla road have been constructed at a cost of Rs. 3,684. There is still some blasting to be done on the ghat before the road can be considered properly open for wheel traffic.

Petty repairs costing Rs. 215 have been made to other roads.

Gugamal Reserve.

The cuttings on the ghat of the Chikalda-Bandam road, which has a length of about 25 miles, have been widened, and general repairs made to other portions of the road at an aggregate expenditure of Rs. 1,736.

Road from Pili to Kalamkhar.

28. The road from Pili to Kalamkhar, length 30 miles, referred to in para. 6 of the review by the Resident of the Report for 1881-82, was made suitable for carts at an expenditure of Rs. 3,500. The work was carried out by the Forest Department in the cold weather of 1880, but was debited to the Public Works grant.

Roads proposed to be made in 1882-83.

29. It is proposed to confine road-making next year entirely to the Bairagarh Reserve, and the following lines, both feeders to the Pili road, have been fixed on:—

First.—From Raipur *via* Jambu and Chowrakund to Patia, length about 18 miles.

Second.—From Sembadoh to Chikalda, length about 14 miles.

30. In order to prevent a re-occurrence of the lamentable loss of cattle which occurred in the grazing tracts of the Melghat and Amraoti Hills in July and August 1880, in consequence of a partial failure of the rains, the Resident deputed an officer of the Public Works Department to examine these tracts with the object of selecting suitable localities for the construction of tanks and anicuts for the storage of water. This officer has furnished me with the following statement of progress made up to date:—

Construction of tanks.

"Tanks have been sanctioned at Dhamangaon, seven miles from Ellichpur, and at Hirgowhan, 14 miles from Amraoti, and they are now half finished, and will impound some of the water which falls this rainy season. Surveys for tanks have been made at

1. Porah in the Amraoti Hills.
2. Mardi in the Melghat Hills.
3. Gattang do.
4. Borudghat do.

and surveys for anicuts, to be eight feet high, have been completed at the following places in the Melghat Hills:—

1. Mota.	7. Wagoli.
2. Pastalai.	8. Baramtana.
3. Patoola.	9. Telghat.
4. Moandra.	10. Chickrera.
5. Pipalkera.	11. Selona.
6. Jiri.	12. Bori.

At present the probable cost of the above works is not known, but it is not likely to be less than Rs. 1,40,000. The object is to have a few large tanks where cattle can collect at the commencement of the monsoon, and to have several anicuts to which they can scatter during long breaks in the rains, such as occurred in 1880. The whole scheme of tanks and anicuts will probably be completed in four years if money is forthcoming."

In addition to the Hirgowhan tank in the Amraoti Hills the tanks now being constructed at Wadali and Jewad for the supply of water to the station and city of Amraoti will also be available for cattle, as they are both situated on the borders of the grazing tract.

Plantations.

31. No extension has been made to the area of plantations.

The plants in the forest garden at Kolkaz suffered considerably from frost, and it has been decided to abandon the garden there, and to establish another in its stead at Makhla.

With a view to this a proposal was made in my letter No. 816, dated 9th March 1883, for constructing a tank at Makhla for irrigation purposes, there being a great scarcity of water on the plateau. At the same time it was suggested that a tank should be made at Gugamal with the object of forming a nursery there for the raising of "harra" trees (terminalia chebula) to plant out in suitable localities on the plateau. The site is a very favourable one for the growth of "harra," and the only difficulty in the way of propagating the tree is the present scarcity of water. The Resident approved of the construction of these tanks, and the work is to be entrusted to the special engineer officer now employed in the grazing tracts of the Melghat and Amraoti Hills.

An experiment has been made this year in the broad-cast sowing of teak. About 8,000 lbs. of seed were scattered over the northern slopes of the Gugamal Hill, where there are few seed bearing trees; and if the results are at all successful, sowings in this manner will be made in future years on an extensive scale. The work costs very little, and it is one that the subordinate Establishment can be usefully employed on.

Buildings.

32. Rest-houses and thanas were repaired and kept in good order at an expenditure of Rs. 606.

33. The topographical survey, on the scale of 4 inches=one mile, of the remaining two black soil villages of Karimal and Harisal in the Bairagarh Reserve, has been completed. All nine villages have now been surveyed, and maps of them are in course of preparation.

Forest survey operations.

The boundary lines of the four black soil villages in the Gugamal Reserve have also been surveyed, although the topography of them has not yet been commenced. In addition to the above work 85 miles of boundary line and 43 miles of road in the Bairagarh Reserve, and 79 miles of boundary line and 22 miles of road in the Gugamal Reserve, have been surveyed.

None of this work, nor of that effected in previous years, will have to be done over again, if the survey of the whole Melghat Taluk, which has now, I believe, been recommended by the Resident, is sanctioned by the Government of India.

Red soil villages in the Bairagarh and Gugamal Reserves.

34. Besides the nine black soil or permanent villages in the Bairagarh Reserve, there still remain nine red soil villages in which the shifting system of cultivation is practised, *viz.* :—

1. Kuhi.	5. Makhla.
2. Awagar.	6. Mariam.
3. Chunkeri.	7. Pandia.
4. Kund.	8. Mangia.

9. Kamda.

They are all small villages, and it is expected that in a few years the inhabitants will move into the black soil villages, where there is ample culturable and other land available for them. In the Gugamal Reserve there is only one red soil village left in addition to the four permanent villages, *viz.*, Chiladari.

3.—*Yield and Working.*

Yield and working.

35. The cutting over of badly grown teak and other trees in compartment No. 11 of the Bairagarh Reserve, with a view to securing healthy coppice shoots from the stools, has been continued, altogether 1,683 trees being felled. The estimated yield of sound wood derived from them was 24,126 cubic feet, or 2,407 cubic feet more than the yield of the fellings of last year. The felling was done departmentally, and the trees as they fell sold by auction. There was a better demand for the timber than last year; and I trust the sales will henceforth increase annually, for now that re-production is establishing itself apace, the quicker all badly grown trees are cut over the better. At the present rate it would take fully 150 years to carry the work over the entire area of the Bairagarh Reserve.

Inquiry is also being made for wood of other descriptions than teak, as for instance hulda (*adina cordifolia*) sadra (*terminalia tomentosa*) and dowra (*anogeissus latifolia*,) and the thinning out of trees of these kinds to give more room to teak seedlings can be done with advantage. Fellings are only made to meet the actual demand for timber, and no depôts are maintained.

Compared with last year the number of bamboos exported was :—

	1881-82.	1882-83.
Bairagarh Reserve	444,350 ...	1,142,067
Gugamal do.	173,300 ...	467,928
	617,650	1,609,995

The large increase of 992,345 in the year under report is most satisfactory, and is mainly attributable to the opening out of the Melghat by good cart roads. The more bamboos that are sold the better, so long as the clumps are not overcut, and this cannot well happen when the forests are worked on rotation; and where only ripe and not green bamboos are taken as in the Melghat. Bamboos, if not cut when ripe only rot, and the possible yield of this description of produce is not nearly worked up to yet in the Melghat Reserves. The next crop of bamboos in these forests will be very much greater than the present one, for where clumps have seeded every vacant piece of ground has become covered with a young growth. There being no annual fires to destroy seed and the soil under fire conservancy having become covered with a rich humus, germination is profuse on the occasion of bamboos seeding.

4.—*Financial Results.*

Financial results.

36. The following statement exhibits the revenue and expenditure of the Melghat Reserves:—

Budget-heads.	Bairagarh.		Gugamal and Chikalda.		Total.	
	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts.						
I.—Timber, &c., removed by Government...	3,629	5,117	...	...	3,629	5,117
II.— Do., do. by purchasers ...	6,089	12,986	1,738	4,679	7,827	17,665
III.—Confiscated and waif wood ...	...	33	...	102	...	135
V.—Miscellaneous	60	103	1	3	61	106
Total ...	9,778	18,239	1,739	4,784	11,517	23,023
Expenditure.						
Working charges A	6,346	13,647	7,955	3,067	14,301	16,714
Establishment B	4,283	4,492	2,468	2,586	6,751	7,078
Total ...	10,629	18,139	10,423	5,653	21,052	23,792

The receipts and charges of the divisional office were:—

	1881-82. Rs.	1882-83. Rs.
Receipts		365
Expenditure on		
Works A.	18,460	1,078
Establishment and Contingencies ...	14,844	14,769
	33,304	15,847

The increase in revenue during 1882-83 is accounted for by larger sales of timber and bamboos, whilst the decrease under divisional office expenditure A. is owing to the annual compensation payment of Rs. 17,119 to the Melghat Rajas having been debited against the unreserved forests instead of against the reserves, as was done last year.

B.—Amraoti Range.

1.—*Area and Boundaries.*

Area and boundaries.

37. The executive charge of the Amraoti Range continued to be held by the Conservator, as the proposals for forming the district in which the range is situated into a separate forest division were not sanctioned till the close of April 1883.

The recommendation made in my letter No. 867, dated 13th January 1882, for enlarging the Chirori closed block and abandoning the Bhiwapur block has lately received the sanction of the Resident, and will now be given effect to. The area closed for the production of wood will be reduced by two square miles, to the advantage of the allotment made for grazing. The Chirori block as revised will, however, gain by being rendered more compact in shape and having within it the best timber producing land in the whole range of hills. The entire closed area too will be in close proximity to the civil station of Amraoti and the thickly populated country adjoining. It will be possible hereafter, should such appear desirable, to still further enlarge the Chirori block by taking up some of the surrounding grazing lands.

2.—*Protection and Improvement.*

Prosecutions for breaches of Forest Rules.

38. Fourteen prosecutions were made, in twelve of which convictions were obtained.

Most of the offences committed were for evading payment of dues.

Fire protection.

39. The following is a comparative statement of areas protected from fire:—

Reserve.	Protected. 1882.	Protected. 1883.	Increase. areas.	Decrease.
Amraoti Hills ...	13,676 ...	15,585 ...	1,909	...

There has been in the year under report an increased area protected of 1,909 acres, while the expenditure has decreased by Rs. 517.

The same area was attempted to be protected in both years, *viz.*, 17,944 acres.

Only one fire occurred, and it was accidental, caused by a grass cutter's bullock treading on a box of lucifer matches, which fell from the man's puggree, as he was loading the animal. The man was prosecuted and fined Rs. 100.

The fire was a very severe one, as it occurred in the middle of the day in the hot weather, when there was a high wind blowing. In the extinguishing of the fire a forest guard and one villager lost their lives, while two other villagers died afterwards from the effects of burns. These four men got cut off from their fellow workmen, and being encircled by burning jungle, they unfortunately took refuge in a tree surrounded by high grass and shrubs, with the result that two of them were killed on the spot, whilst the others died in a few days from injuries sustained.

Cultural operations.

40. A commencement has been made towards re-stocking the areas formerly under cultivation in the Chirori block. Operations were conducted over 303 acres during the past working season. Strips three feet wide were deeply ploughed at 15 feet distances, and sown in some places with babul, in others with tewas, according to the nature of the soil, seed being also sown broad-cast on the intervening spaces.

A large quantity of seed that was left over from these operations was also scattered broad-cast in selected places in the jungle, and the result is being watched with interest. The expenditure on these operations amounted to Rs. 443 or about Rs. 1·7 per acre, of which Rs. 12 only were debited in the accounts of the year under report.

The above expenditure includes the cost of a nursery of bamboos *(dendrocalamus strictus)* of about one-fourth acre in extent which has been formed with a view to the introduction of bamboos into the Amraoti Hills. The plants will be transferred from the nursery to the banks of the Chirori and other main nallahs.

3.—*Yield and Working.*

Yield and working.

41. The yield is exhibited in Appendix E., to which is attached a return, Appendix F., showing the number of cattle grazed. Compared with last year, there has been a considerable increase in the yield of every description of produce, whilst the number of cattle grazed is greater by 11,337.

The changes made in the system of working and referred to in para. 29 of the Report for 1881-82 have proved beneficial. It was difficult, however, to confine cattle to the portions of the ramnas opened for grazing, and for the future instead of admitting cattle to the low lying areas which represent the outer portions of the ramnas, two blocks will be opened which project from the main body of these lands, and from which therefore trespass will be easily prevented. By leaving the ramnas more compact, which this measure will have the effect of doing, their protection will be rendered a matter of less difficulty.

4.—*Financial Results.*

Financial results.

42. The receipts and charges of the range compare as follow:—

Budget heads.	1881-82.	1882-83.
Receipts.	Rs.	Rs.
II. Timber, &c., removed by purchasers ...	9,592 ...	12,934
III. Confiscated and waif wood	5 ...	8
V. Miscellaneous	... ...	2
Total ...	9,597 ...	12,944
Expenditure on		
Working charges A.	1,086 ...	512
Establishment B.	1,699 ...	1,799
Total ...	2,785 ...	2,311

There is thus in favour of the year under report an increase in revenue of Rs. 3,347 and a decrease in expenditure of Rs. 474. The increase in revenue is due to larger sales of every description of produce, whilst the decrease in expenditure is principally under fire conservancy.

(c.)—South Berar Division.

1.—*Area and Boundaries.*

Changes in area.

43. The area of State forests in the South Berar Division has been increased by 13,925 acres by the taking up of the Amdari Reserve, and by a few changes made in the areas of other reserves.

The Amdari Reserve is situated in the Buldana District and the greater portion of it was formerly a District reserve. It has an area of 13,717 acres.

In the Mandwa Reserve an error of 100 acres was detected in the detailed area statements, and this area has now been given credit to. An additional area of 42 acres 10 guntas was also taken up with a view to improving the boundary lines.

In the Loni Reserve three acres have had to be deducted owing to an error discovered in the field statements.

In the Rui Reserve two fields, with an aggregate area of 70 acres, were resumed in order to straighten the boundary line, whilst one acre was abandoned with a view to the exclusion of a temple situated near the edge of the forest.

In the taking up of the above additional areas Rs. 240 were expended in compensation, whilst the alterations in boundary lines necessitated, and the maintenance of former lines, cost Rs. 478. The Amdari Reserve was demarcated during the hot weather, but the expenditure will appear in the accounts of 1883-84.

2.—*Protection and Improvement.*

Prosecutions for breaches of Forest Rules.

44. Eight prosecutions, implicating fourteen persons, were instituted for breaches of the Forest Rules. The offences committed were of comparatively trifling importance.

The divisional officer reports that no difficulty is now experienced in excluding cattle from the Garumatergaon and Ghatbori Reserves. The number of cattle pounded was 563, compared with 1,117 in 1881-82.

Fire protection.

45. The following statement exhibits the areas protected from fire:—

Reserve.	Protected. 1882.	Protected. 1883.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
Garumatergaon	44,142	42,192	...	1,950
Ghatbori	21,720	28,000	1,047	...
Mandwa	5,233			
Penganga	11,575	10,295	...	1,280
Loni and Bhongaon	2,279	2,274	...	5
Rui	6,420	6,245	...	175
Total ...	91,369	89,006	1,047	3,410
			Less increase ...	1,047
			Net decrease ...	2,363

Compared with 1881-82 the area protected is less by 2,363 acres, whilst the expenditure has decreased by Rs. 259. The same areas were attempted to be protected in both years.

Four fires occurred in the Garumatergaon Reserve, burning altogether 3,800 acres. Three of the fires originated in line burning, but the fourth and most disastrous fire, extending over 2,880 acres, was accidental, caused by a whirl wind carrying some burning weeds from a cultivated field three hundred yards distant from the cleared boundary line, and depositing them inside the reserve. In the Ghatbori Reserve three fires broke out, burning in the aggregate 1,235 acres. Two of the fires originated in line burning, and the third, the worst, and which spread over an area of 960 acres, is supposed to have been the work of an incendiary. Its origin was not discovered. In the Penganga Reserve only one fire occurred, burning 1,280 acres. It was reported to have been purposely kindled by some evil disposed person, but the case could not be proved.

In the Loni Reserve two acres were burnt owing to carelessness of travellers.

No fire occurred in the Bhongaon Reserve.

In the Rui Reserve there were two fires which were said to have been caused by incendiaries. Altogether 402 acres were burnt. The neighbouring villagers showed a strong disinclination to help in the extinguishing of these fires, and three Patels were suspended for three months in consequence, a punishment which had a most salutary effect, and prevented the occurrence of further fires.

Re-production of anjan in the Garumatergaon Reserve.

46. The divisional officer has recorded the following interesting observations as the result of the experiment with anjan *(Hardwickia binata)* seedlings referred to in para. 35 of the Report for 1881-82:—

"During the hot weather of 1882 twelve plots as below, each 12' × 12', were marked off, and the seedlings in them counted:—

No. of plot.	Locality.	No. of seedlings counted.	Remarks.
1	Gondankera ...	15 ...	...
2	Do. ...	Too thick to count ...	Over a hundred seedlings.
3	Do. ...	16 ...	...
4	Borkheda ...	Too thick to count ...	Do.
5	Do. ...	110 ...	...
6	Bootha ...	96 ...	...
7	Do. ...	44 ...	...
8	Matergaon ...	Too thick to count ...	Do.
9	Do. ...	Do. ...	Do.
10	Karwand ...	Do. ...	Do.
11	Do. ...	Do. ...	Do.
12	Do. ...	45 ...	Do.

The seedlings were at the time withered up and without leaves. After the first fall of rain, they sent out fresh leaves and a few of them grew in height, but the majority remained stunted. Hardly any had died during the hot weather. In February 1883 about half the number of plants in each plot shed their leaves; in March the remainder withered up, and by the end of the hot weather all seemed as if dead, but the roots were fresh and full of life.

It would appear that anjan seedlings commence to wither early in February, and by the end of March have entirely lost their leaves. The first rain seems to revive over 90 per cent. of the plants, but the increase in height and strength except in very few instances appears to be very slight. After two years growth the average height of seedlings which were watched was not more than four inches. Near Matergaon on the banks of the Ghan river where the soil is particularly good some plants were from six to eight inches high."

Repairs to roads.

47. Petty repairs, such as removing brushwood and stones, and keeping clear of trees, were made to most of the roads passing through the reserves, at a total cost of Rs. 126.

Cultural operations.

48. The areas formerly under cultivation in the Loni and Bhangaon Babul Reserves, and which occupy 597 acres, have been sown with babul and sounder *(prosopis spicigera)* during the past season.

The land was ploughed in strips three feet wide and fifteen feet apart, and the seed sown in the same manner as grain, either with a "bakar" or plough, according to the nature of the soil. Seed was also sown broad-cast on the intervening spaces. The operations cost altogether Rs. 634, or about Rs. 1·1 per acre, of which Rs. 423 only are included in the accounts of the year under report.

Buildings.

49. Six new thanas were erected, and one repaired at an expenditure in the aggregate of Rs. 194.

Survey operations.

50. The boundary lines of the Garumatergaon, Ghatbori, and Penganga Reserves have been surveyed by the Forest Survey Department. The amount of work done is shown below:—

Name of Reserve.	Length of boundary.	Length of roads.	Topography.
	Miles.	Miles.	Sq. Miles.
Garumatergaon	52 ...	8 ...	...
Ghatbori	85 ...	3 ...	...
Penganga	41 ...	... ...	...
Strip of land 5 chains in width on each side of the boundaries and roads	... ...	... ...	54
Total ...	178	11	54

3.—*Yield and Working.*

Yield and working.

51. The reserves in South Berar continue to have complete rest, the only produce taken from them being grass and dead and fallen wood. The yield of these descriptions of produce is exhibited in Appendix E.

It is satisfactory to observe that the quantity of grass sold was 2,445,345 lbs. more than in the previous year, the figures being:—

1881-82. lbs.		1882-83. lbs.
3,772,440	...	6,217,785

52. As an experimental measure with a view to ascertaining the average yield per acre of the present babul buns in Berar, and the cheapest and surest method of raising a fresh crop of babul on areas cleared, 19 acres were felled in the Loni Reserve and 22 acres in the Bhongaon Reserve. The out-turn at Loni was 202 tons, or about 10½ tons per acre. The age of the trees was not known, but trees of similar growth could probably be produced in fifteen years.

Cutting of babul in Loni and Bhongaon Reserves.

The out-turn at Bhongaon was 322 tons, or about 14½ tons per acre. The trees at Bhongaon appeared to be of about the same age as those at Loni, but there were more of them to the acre.

Curious to relate, there was very little demand for the wood, and the auction sales were badly attended. This would seem to point to the large amount of babul still on cultivated lands being sufficient to meet the present demand for wood of this description.

In case the self-sown seed on the ground should not prove sufficient to ensure a complete crop, plots 3′ × 3′ were dug at six feet distances in lines 15 feet apart and sown with babul.

4.—*Financial Results.*

Financial results.

53. The financial results are exhibited below:—

Budget heads.	Garumatergaon.		Ghatbori.		Penganga.		Mandya.		Loni and Bhongaon.		Ruf.		Total.	
	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts.														
II.—Timber, &c., removed by purchasers...	197	406	468	856	205	501	...	...	79	1,219	14	369	963	3,351
III.—Confiscated and waif wood ...	3	...	...	...	...	...	...	...	...	...	...	...	3	...
V.—Miscellaneous	...	25	3	8	...	...	...	...	...	114	...	...	3	147
Total ...	200	431	471	864	205	501	...	...	79	1,333	14	369	969	3,498
Expenditure.														
Works A	726	537	694	420	361	242	716	...	2,616	884	795	293	5,908	2,376
Establishment B...	1,389	1,423	1,174	1,544	666	671	67	...	271	452	27	361	3,594	4,451
Total ...	2,115	1,960	1,868	1,964	1,027	913	783	...	2,887	1,336	822	654	9,502	6,827

The receipts and charges of the divisional office were:—

	1881-82. Rs.	1882-83. Rs.
Receipts	171 ...	...
Expenditure—		
Working charges A	865 ...	1,416
Establishment B	9,254 ...	9,751
	10,119 ...	11,167

The increase in revenue is satisfactory, and it is hoped that in a few years the receipts may equal the expenditure. There is room for a very large increase in the grass sales.

As soon as fire conservancy is more securely established, it is for consideration whether light grazing might not be allowed in portions of the reserves of this division at certain seasons of the year. An experiment might at any rate be made. If the grazing were properly controlled, I do not consider that any great injury to the forests could possibly result.

The decrease in expenditure is due to few compensation payments for the taking up of land having had to be made, and also to greater economy in fire conservancy.

D.—Wun Division.

1.—*Area and Boundaries.*

Changes in area.

54. No changes have been made in the boundaries of any of the reserves in this division, although in Form No. 49, a net decrease in area of 926 acres is shown in consequence of errors detected in field area statements.

The Gondwakri and Korad Reserves, which remained undemarcated at the close of last year, have been demarcated during the past season, and the boundary lines of other reserves maintained in good order. The expenditure on these works amounted to Rs. 601.

The proposals made in my letter No. 586, dated 11th December 1882, for the resuming of the inhabited village of Khapri, situated in the centre of the Kelapur Reserve, have received the sanction of the Resident, but will not be given effect to till March 1884, as by the time sanction was received, the villagers had prepared their lands for the next "kharif" crop.

The terms arranged comprise the grant in exchange of the village of Mathni on the borders of the reserve, and a money compensation of Rs. 930-8-0, also the exclusion from the reserve of the portion of the village of Dunki adjoining Mathni with a view of providing grazing not only for the cattle of Mathni, but also for those of Mungi Savargaon, a neighbouring village, with at present an insufficiency of grazing ground. The areas of the three villages affected are:—

Khapri	...	1,255 acres.
Mathni	...	719 do.
Dunki	...	2,311 do.

The area of Dunki to be given up amounts to about 1,000 acres, and therefore, while gaining 1,255 acres, the reserve will lose about 1,719 acres.

The forest growth both in Mathni and the western portion of Dunki is of little value at present, and consequently the reserve will not suffer much by the exchange, whilst it will benefit by being rendered more compact, and by having a more regular line of boundary.

2.—*Protection and Improvement.*

Prosecutions for breaches of Forest Rules.

55. Twenty-five prosecutions were made for breaches of the Forest Rules, in nine of which only were convictions obtained. The percentage of convictions to prosecutions is small. In no case, however, was any grave offence committed.

Fire protection.

56. Subjoined is a statement of the areas protected from fire:—

Reserve.	Protected.		Increase.	Decrease.
	1882.	1883.		
	Acres.	Acres.	Acres.	Acres.
Kinwat	51,918	50,638	...	1,280
Kelapur	14,080	20,318	6,238	...
Patroat	2,639	51,535	48,896	...
Wun Range	...	5,909	5,909	...
Total ...	68,637	128,400	61,043	1,280
	Less decrease ...		1,280	
	Net increase ...		59,763	

Compared with last year there has been an increased area protected of 59,763 acres at an additional expenditure of Rs. 1,230.

Two fires occurred in the Kinwat Reserve, burning altogether 1,920 acres. Both fires originated in line burning. In the Kelapur Reserve fires broke out on

twelve different occasions. Four of the fires are reported to have been due to accidents in line burning, and seven to incendiarism. In the accidental fires only 3,680 acres were burnt.

There was a good deal of friction during the year between the Forest officer, Mr. Stewart, and the civil authorities. Mr. Stewart complained of not being properly supported by the Deputy Commissioner, and that the Revenue subordinates and inhabitants of villages bordering the reserve were aware of this, and set him at defiance. I visited the reserve myself in January and certainly found a bad feeling existing between the villagers and the Forest officials. The former had no real grievances to urge; and I was inclined to think that if the Deputy Commissioner exhibited a little more interest in fire conservancy, and instilled the same interest into his subordinates, the protection of the Kelapur Reserve would be a matter of very little difficulty. Mr. Stewart has since been transferred, and proposals have been submitted for subordinating Divisional Forest Officers to Deputy Commissioners; and these changes will, it is expected, result in more successful fire conservancy in future in the Wun Division.

In Patroat there was but one fire, and its origin could not be discovered. It burnt 430 acres. An attempt was made for the first time to protect the Krishnapur, Phiski, Tewsala, and Bhiokund Reserves. Out of 13,301 acres, 5,909 were saved.

Repairs to roads.

57. The roads leading through the reserves were kept open at an expenditure of Rs. 148.

Buildings.

58. Repairs costing Rs. 130 were made to the thanas in the Kinwat, Patroat, and Kelapur Reserves.

3.—*Yield and Working.*

Yield and working.

59. The forests in this division enjoy complete rest. Bamboos and grass continue to be the only articles of export, and the following quantities were disposed of:—

		1881-82.		1882-83.
Bamboos	... No.	33,200	...	37,100
Grass	... lbs.	4,751,880	...	8,211,000

There is room for a large increase both in the out-turn of bamboos and grass, and efforts are being made to increase the demand for them.

4.—*Financial Results.*

Financial results.

60. The financial results are given in the subjoined statement:—

Budget heads.	Kinwat.		Kelapur.		Yeotmal and Darwa Range.		Wun Range		Total.	
	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.
Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
II.—Timber, &c., removed by purchasers.	152	101	1,209	945	563	687	...	560	1,924	2,293
III.—Confiscated and waif wood ...	...	...	...	...	2	3	...	...	2	3
V.—Miscellaneous ...	...	...	...	6	...	...	...	5	...	11
Total ...	152	101	1,209	951	565	690	...	565	1,926	2,307
Expenditure.										
Working charges A.	585	754	1,030	887	460	783	...	192	2,075	2,616
Establishment B. ...	1,396	1,449	2,020	1,153	1,279	1,426	...	680	4,695	4,708
Total ...	1,981	2,203	3,050	2,040	1,739	2,209	...	872	6,770	7,324

The receipts and charges of the Divisional office were :—

	1881-82. Rs.	1882-83. Rs.
Receipts	... ...	2
Expenditure—		
Working charges A.	146 ...	604
Establishment B.	6,772 ...	8,716
	6,918 ...	9,320

The figures call for no particular remark. The increase in revenue is small, whilst the increase in establishment charges is due to the promotion of the Divisional officer. The suggestion offered in para. 53 with a view to increasing the revenue of the reserves in the South Berar Division is equally applicable to the reserves of the Wun Division.

(b)—DISTRICT RESERVED FORESTS.

DIRECTION DIVISION.

1.—*Area and Boundaries.*

Changes in area.

61. The area of district reserves has been reduced by 15,999 acres in consequence of the transfer of the Amdari Reserve to State forests, and the detection of several errors in detailed area statements.

The area remaining at the close of the year was 181,159 acres, or 283 squares miles. It is now under re-classification.

2.—*Protection and Improvement.*

Prosecutions for breaches of Forest Rules.

62. The following is a comparative statement of prosecutions instituted for breaches of the Forest Rules. This statement includes cases pertaining to the Unreserved forests of the Direction Division :—

Distric	1881-82. Cases.	1881-82. Convictions.	1882-83. Cases.	1882-83. Convictions.
Ellichpur ...	27 ...	18 ...	30 ...	23
Amraoti ...	19 ...	14 ...	27 ...	20
Akola ...	16 ...	9 ...	103 ...	88
Buldana ...	15 ...	12 ...	20 ...	16
Basim ...	50 ...	46 ...	32 ...	28
Wun ...	75 ...	71 ...	29 ...	27
	202	170	241	202

There has been an increase of 39 in the number of cases, whilst the proportion of convictions to prosecutions remains the same. None of the cases were of any great importance.

Fire protection.

63. Grazing continued to be permitted in all the reserves, and consequently comparatively little injury was done by fire. No systematic fire protection as in State forests was attempted.

3.—*Yield and Working.*

Yield and working.

64. The system of working remained unchanged, and may thus be briefly described.

Timber is only allowed to be cut on permission obtained from the Deputy Commissioner or from such of his Revenue or Forest subordinates as may be authorised by him to grant permission. It must in all cases be paid for at certain fixed rates.

Fuel may be cut without permission, and is free when used within the limits of the village in which it is cut; when exported in quantities greater than head-loads, it is liable to duty.

Grass and minor produce are sold by auction. The dues on timber and fuel are levied by Patels and Patwaris, who as remuneration are granted a percentage on their collections.

It is almost impossible to obtain accurate information regarding the yield of these forests, and the attempt has not therefore been made. The same difficulty will, however, no longer exist, when the forests have been re-classified, and the areas restricted within which fellings are permitted.

4.—Financial Results.

Financial results.

65. The following is a statement of the financial results:—

Budget Heads.	Ellichpur District.		Amraoti District.		Akola District.		Buldana District.		Basim District.		Total.	
	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82	1882-83.	1881-82.	1882-83.
Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
II.—Timber, &c., removed by purchasers.	1,916	2,441	4,237	...	661	4,087	839	637	801	1,126	8,454	8,291
III.—Confiscated and waif wood ...	...	...	...	...	...	...	53	5	...	...	53	5
V.—Miscellaneous ...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	1,916	2,441	4,237	...	661	4,087	892	642	801	1,126	8,507	8,296
Expenditure.												
Working charges A.	334	395	...	...	623	307	342	166	109	42	1,408	910
Establishments B.	433	423	..	...	1,375	1,115	...	...	1,333	936	3,141	2,474
Total ...	767	818	...	...	1,998	1,422	342	166	1,442	978	4,549	3,384
Surplus ...	1,149	1,623	4,237	...	...	2,665	550	476	...	148	3,958	4,912
Deficit ...	...	...	...	...	1,337	...	...	...	641	...	...	...

Financial results.

No entries have been made under Amraoti and Wun, as the Deputy Commissioners of these districts have made no distinction between the District reserved and Unreserved Forests, both being worked under the same rules. The only real difference between the two classes of forest is that in the reserved area the extension of cultivation is prohibited.

The figures call for no particular remark. The surplus is Rs. 954 greater than in 1881-82.

CHAPTER III.—Unreserved Forests.

A.—Melghat Division.

Changes in area.

66. The forests of the Melghat are the only ones of this class that are under the direct management of Forest officers. There have been no changes in area during the year.

Demarcation of jagir villages in Melghat.

67. The following jagir villages belonging to Raja Tarasing have been demarcated by the Deputy Commissioner of Ellichpur and the Divisonal Forest Officer in concert:—

1. Titamba.
2. Lakto.
3. Susarda.
4. Barn.
5. Chondu.
6. Palaskundi.
7. Ranigowhan.
8. Karanjuli.
9. Dulghat.

The work has not yet received the sanction of the Resident. Should the boundaries recommended be approved of, much trouble and inconvenience will be saved, not only to the Forest Department, but also to cattle graziers, and exporters of Forest produce.

It is hoped that the Deputy Commissioner will be able to complete the demarcation of the remaining jagir villages during the ensuing year, as it is a matter urgently requiring settlement.

2.—Protection and Improvement.

Prosecutions for breaches of Forest Rules.

68. Of 137 prosecutions for breaches of the Forest Rules, 114 were for evading payment of dues at the nakas, and 23 for infringement of rules in the forests. The number of successful prosecutions was 122. The fines inflicted amounted to Rs. 912.

No instance of dhya cultivation occurred, whilst only on 14 occasions were bamboos cut for fodder. The offenders in each were "gaolis," and they were fined altogether Rs. 362.

Buildings.

69. Sixteen nakas were repaired at a cost of Rs. 247.

Other works.

70. A well was constructed at Basali by the Local Fund Engineer of the Akola District. The Forest Department contributed Rs. 576 to it. The remainder of the cost was debited to Local Funds.

3.—*Yield and Working.*

Yield and working.

71. The forests are open to the cutting of all descriptions of produce without restriction. The produce is free within the Melghat itself, but on being exported is, with the exception of head loads of grass and firewood, subject to the payment of duty at the nakas or revenue stations established at the foot of the hills.

The approximate yield and the number of cattle grazed are shown in Appendices E. and F. respectively. Compared with last year there has been a large increase in the export of timber, firewood, and bamboos. Thus:—

		1881-82.	1882-83.
Teak, tewas and shesham,	c. ft.	125,215	155,563
Timber of other kinds	,,	101,764	142,640
Firewood	,,	183,010	378,491
Bamboos	No.	1,035,600	1,362,980

There is little difference in the number of cattle grazed during the two years.

Sanction has lately been received to the withdrawal of the prohibitive duty on teak "ballees" imposed in 1881, and a considerable increase in the export of this description of wood may in consequence be expected next year. The old rate of duty of one anna per "ballee" has not been reverted to, but a reduction made from annas 4 to annas 2.

A comparative statement of the estimated exports of timber, &c., prepared in accordance with para. 7 of the Review by the Government of India of the Report for 1879-80, is given in Appendix G.

4.—*Financial Results.*

Financial results.

72. The subjoined statement exhibits the financial results:—

Budget head.	1881-82. Rs.	1882-83. Rs.
Receipts.		
II.—*Timber &c., removed by purchasers*—		
a. Timber	50,313	64,823
b. Firewood and charcoal	7,565	9,650
c. Bamboos	10,356	13,630
d. Grazing and fodder grass	11,382	10,822
e. Other minor produce	2,967	3,261
III.—*Confiscated and waif wood*	70	128
V.—*Miscellaneous*—		
c. Other sources	13	7
Total	82,666	1,02,321
Expenditure.		
Working charges A.	3,199	20,999
Establishments B.	7,403	7,074
Total	10,602	28,073
Surplus	72,064	74,248

There has been an increase in revenue during the year under almost every head, the total increase amounting to Rs. 19,655.

Under expenditure the increase is merely nominal, the payment of Rs. 17,120 as compensation to the Melghat Rajas for the resumption of their forest rights having been debited to Working charges A., instead of to the Divisional office, as was done last year.

B.—Direction Division.

1.—*Area and Boundaries.*

Changes in area.

73. The area of Unreserved forests has decreased by 47,919 acres, due chiefly to the extension of cultivation and the taking up of the Amdari Reserve. The details of these forests are given in Form No. 49.

The figures have little interest at present, as the entire area to which they relate is being re-classified.

There is a considerable difference between the areas shown as district forests in Form No. 49 and those exhibited in statement given in Appendix I. In the former free grazing land has been excluded, whilst in the latter it has been retained, as under the new classification instead of alloting free grazing land to each village, plough cattle are permitted to graze free to the extent of one bullock for every ten acres under cultivation.

The figures in column 3 of Appendix I. have not been corrected up to the 31st March 1883, but are founded partly on the Revenue returns for 1881-82 and partly on those for 1882-83, but for all practical purposes they may be considered correct.

2.—*Protection and Improvement.*

Progress made in re-classification.

74. The forests of the Ellichpur, Amraoti, and Wun Districts, and also those of the Basim District, with the exception of one taluk, have been re-classified, and it is expected that the entire work will be finished by the end of next official year. The sanction of the Resident has as yet only been obtained to the schemes for 5 out of the 12 taluks completed. The classification is exhibited in Appendix I.

Plantations.

75. In Form 50 an expenditure of Rs. 181 is shown for road side planting in the Ellichpur and Amraoti Districts. This expenditure ought properly speaking to have been debited to the grant for arboriculture, and not to the Forest Department.

3—*Yield and Working.*

Yield and working.

76. The system of management is the same as in the District reserves, and has already been described in para. 64. No attempt has been made to obtain statistics of yield, as they could not be relied on. Under the new classification the same difficulty will not be experienced, for the only produce that will be subject to taxation will be timber of reserved kinds to be found merely in the woods and a few of the grazing lands, and timber and fuel when used by contractors and other large consumers. Timber of the commoner kinds and fuel will be free to villagers for their own use, a prohibition being placed on the felling of a few trees that are more valuable for fruit and shade than for wood. Minor forest produce and the grass in woods and ramnas will be sold by auction. In the grazing lands certain fixed rates per head of cattle will be charged for grazing.

4.—*Financial Results.*

Financial results.

77. The revenue and expenditure stand as follows :—

Budget heads.	Ellichpur.		Amraoti.		Akola.		Buldana.		Wun.		Basim.		Total.	
	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.
Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
II.—Timber, &c., removed by purchasers—														
(a).—Timber	...	...	...	2	...	...	2,236	3,648	1,822	2,683	248	770	4,306	7,103
(b).—Firewood and charcoal ...	...	...	1,031	1,532	1,271	1,624	586	891	157	364	1,490	1,243	4,535	5,654
(c).—Bamboos	...	...	...	...	43	21	...	...	330	867	27	11	400	899
(d).—Grazing and fodder grass ...	1,278	2,144	36,409	36,724	13,365	13,338	15,101	18,168	20,427	23,798	5,703	7,598	92,283	1,01,770
(e).—Other minor produce ...	724	469	2,810	2,718	570	354	1,071	2,257	4,051	5,129	4,754	5,060	13,980	15,987
III.—Confiscated and waif wood ...	1,607	1,357	35	7	...	2	237	228	137	157	...	...	2,016	1,751
V.—Miscellaneous—														
(a).—Fines and forfeitures ...	...	...	...	1	...	...	5	...	...	...	...	...	5	1
(b).—Refunds	...	...	47	...	...	...	...	...	17	1	...	...	64	1
(c).—Other sources ...	300	...	...	...	398	611	10	...	101	496	38	...	847	1,107
Total ...	3,909	3,970	40,332	40,984	15,647	15,950	19,246	25,192	27,042	33,495	12,260	14,682	1,18,436	1,34,273
Expenditure.														
Working charges, A.	9	60	2,815	1,757	6,243	183	4,270	2,605	2,582	2,980	721	495	16,640	8,170
Establishments. B.	...	...	976	923	...	...	852	816	1,663	1,262	...	...	3,491	3,001
Total ...	9	60	3,791	2,680	6,243	183	5,122	3,511	4,245	4,242	721	495	20,131	11,171
Surplus ...	3,900	3,910	36,541	38,304	9,404	15,767	14,124	21,681	22,797	29,253	11,539	14,187	98,305	1,23,102

In the Ellichpur, Akola, and Basim Districts the whole of the establishment charges have been shown against the District reserves.

There has been an increase in receipts of Rs. 15,837, and a decrease in expenditure of Rs. 8,960.

The increased revenue is due chiefly to better auction sales of grass and minor produce, and the decreased expenditure to few arrear payments having had to be made to Patels and Patwaries for the collection of forest revenue.

The joint financial results of the working of the District reserves and the Direction Division unreserves are given in Appendices B., C. and D. The receipts and charges of the Direction office were:—

		1881-82. Rs.		1882-83. Rs.
Receipts	... ...	26	...	14
Expenditure				
Working charges A.	...	5,611	...	3,432
Establishments B.	...	20,350	...	27,327
Total	...	25,961		30,759

The increase under establishment charges was due partly to Mr. Bagshawe being retained on special duty in connection with the District forests, and partly to the promotion of the Conservator.

CHAPTER IV.—General Remarks.

Change in form of Forest Annual Reports.

78. The form of Forest Annual Reports has lately been altered by the Government of India, but the Forest Code Addenda and Corrigenda in which the alteration was noted did not reach my office in time to admit of arrangements being made for the introduction of the new form this year. Effect will, however, be given to it next year.

Reduction of revenue survey maps.

79. The revenue survey maps of five reserves have been reduced from the 8″ to 2″ scale, and tracings made of the same.

Now that the District forests are being permanently fixed, it would be of great advantage if taluk maps on the 2inch scale could be prepared on suitably sized sheets showing in different colours each description of forest land, *viz.*, State forests, woods, ramnas, and grazing land. It would not be necessary to show land under cultivation in detail. Blank spaces on the maps would sufficiently indicate the situation and extent of such land. The preparation of these maps would not take long, and would cost comparatively little, whether done by a special establishment, by the Bombay Revenue Survey, or by the Forest Survey Department.

New topographical maps of reserves required.

80. Proposals were submitted in my letter No. 805, dated 6th March 1883, for the topographical survey of the reserves in Berar not included in the Melghat, the Deputy Superintendent of Forest Surveys having informed me that in consequence of the comparative smallness of the areas, it would cost very little more to make a complete survey of them than to survey the boundary lines alone, as is now being done. There are no accurate topographical maps of any of these reserves, and it will be impossible to plot on existing maps the lines now being surveyed.

Orders have not yet been passed on the above proposals pending a report by the Survey Department of the probable cost of the survey and the preparation of maps.

If the survey of the Melghat is sanctioned, the survey of the Berar reserves might be carried on when work was at a stand-still in the Melghat owing to the unhealthiness of the country.

81. The registers of rainfall, &c., in the different reserves are shown in Appendix H. The Superintending Engineer was, I regret to say, unable to arrange for gauging the floods in the rivers referred to in para. 67 of the Report for 1881-82, owing to his staff being fully employed. I trust he may be able to take up the work next year, as it would be interesting to know how much more fire-protected forests absorb the rainfall than unprotected forests.

Rainfall and flood registers.

82. Fines aggregating Rs. 244 were inflicted on 62 subordinates.

Fines inflicted.

83. Mr. Stewart, Assistant Conservator of the Wun Division, proceeded to Europe on furlough in June 1882, and was relieved by Mr. D'Arcy, Assistant Conservator, transferred from Assam. On Mr. Stewart's return in March 1883, Mr. D'Arcy was transferred to the Punjab.

Changes among officers.

84. The following officers have been promoted during the year :—

Promotion of officers.

Mr. A. T. Drysdale from Conservator, 3rd grade, to officiating Conservator, 2nd grade.

Mr. C. Bagshawe from Deputy Conservator, 4th grade, to Deputy Conservator, 3rd grade.

Mr. G. F. Prevost from Assistant Conservator, 1st grade, to officiating Deputy Conservator, 4th grade.

Mr. J. Ballantyne from Assistant Conservator, 1st grade, to officiating Deputy Conservator, 4th grade.

Mr. Rasul Khan from Probationary Sub-Assistant Conservator, to Sub-Assistant Conservator.

85. Mr. Bagshawe was employed for the whole year in the classification of the District forests.

Notice of officers.

He deserves great credit for the arrangements made for the preparation of area returns, and the classification of the areas afterwards. All his work was most thorough. He was transferred to the North-West Provinces shortly after the close of the year, and the remainder of the classification is being done by Mr. Prevost.

The Report speaks for itself of the good work accomplished by Divisional officers.

Messrs. Prevost and Ballantyne are particularly deserving of mention. Their Divisions are in excellent order, more especially the Melghat Division.

Mr. Stewart worked with his usual energy and zeal, but for want of tact was not so successful in his fire conservancy as he might otherwise have been.

Mr. D'Arcy for the short time he was in the province exhibited much interest in his Division, and would, I feel sure, have done good service, had he remained in Berar.

Mr. Ballantyne speaks favourably of the work done by Mr. Rasul Khan in the Melghat Division.

I have the honor to be,

Sir,

Your most obedient servant,

A. T. DRYSDALE,

Conservator of Forests,

Hyderabad Assigned Districts.

APPENDICES

FORESTS

APPENDIX A.—*Statement showing District Reserved and Unreserved Forests under Deputy Commissioners.*

Forest Divisions.	Districts.	Talukas	Area of District Reserves. Babul buns	Other buns including ramnis and coppices.	Total	Unreserved Forests.	Grand Total.
	Amraoti.	Amraoti	2,092	248	2,340	983	3,323
		Chandur	2,040	5,956	7,996	13,194	21,190
		Morsi	2,061	1,703	3,764	41,747	45,511
		Murtazapur	1,216	10,952	12,168	6,748	18,916
		Total	7,409	18,859	26,268	62,672	88,940
	Akola.	Akola	67	19,784	19,851	31,454	51,305
		Akot . ..	1,254	..	1,254	6,443	7,697
		Balapur	216	25,842	26,058	10,706	36,764
		Jalgaon	1,526	...	1,526	22,188	23,714
		Khamgaon	544	..	544	11,107	11,651
		Total	3,607	45,626	49,233	81,898	131,131
	Ellichpur.	Darjapur	2,194	...	2,194	20,010	22,204
		Ellichpur	2,297	...	2,297	4,653	6,950
		Total .	4,491	...	4,491	24,663	29,154
	Buldana.	Chikhli	651	478	1,129	82,731	83,860
		Malkapur	550	451	1,001	23,099	24,100
		Mehkar ...	536	2,466	3,002	83,073	86,075
		Total.	1,737	3,395	5,132	188,903	194,035
	Wun.	Darwha	1,825	17,158	18,983	166,035	185,018
		Kelapur	162	41,414	41,576	103,956	145,532
		Yeotmal	323	517	840	78,146	78,986
		Wun	28	9,225	9,253	124,165	133,418
		Total..	2,338	68,314	70,652	472,302	542,954
	Basim.	Basim	2,013	8,084	10,097	86,768	96,865
		Mangrul	307	10,926	11,233	91,689	102,922
		Purad	350	3,703	4,053	275,300	279,353
		Total...	2,670	22,713	25,383	453,757	479,140
		Grand Total..	22,252	158,907	181,159	1,284,195	1,465,354

FORESTS.

APPENDIX B.—*Revenue realized by Civil Officers from Forests (Reserved and Unreserved) under their control in* 1882-83.

	Amraoti.	Akola.	Ellichpur.	Buldana.	Wun.	Basim.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Grazing sales, Rule XIV.		7,545 14 0	2,032 2 0	9,687 7 0	...	4,678 2 0
2. Do. „ XV.	36,681 12 0	2,834 12 0	...	241 0 0	...	291 8 0
3. Do. „ XVI.		5,792 8 0	112 0 0	7,881 0 0	...	2,576 12 8
4. Do. „ XIV. and XVI	...	...	...	243 0 0	...	...
5. Do. in Babul Buns and District Reserved Forests.	...	13 4 0	1,511 0 0	341 9 9	...	1,172 14 0
6. Grazing cess	12 12 0	...	...	...	23,797 7 5	...
7. Sale of grass in ramnas	..	...	...	116 0 0	...	...
Total ...	36,694 8 0	16,186 6 0	3,655 2 0	18,510 0 0	23,797 7 5	8,719 4 8
8. Mango trees, produce of	2,667 3 9	65 15 0	200 11 0	2,256 11 0	4,044 1 9	82 11 0
9. Mowha trees, do.		287 11 0	267 14 6			884 15 0
10. Sale of wood in Babul Buns	191 1 0	1,404 10 10	926 12 0	34 2 0	...	...
11. Minor forest produce	51 9 6	...	3 10 0	...	1,085 3 0	...
12. Passes under Rule I.	...	...	...	1,914 4 2	2,683 6 1	769 6 3
13. Do. „ II.	...	...	...	...	...	...
14. Do. „ III.	...	357 3 0	...	1,967 2 6	...	3,486 1 0
15. Do. „ IV.	...	...	...	...	...	...
16. Do. „ V.	354 14 0	388 3 3	...	668 6 0	...	749 14 3
17. Do. „ VI.	1 6 0	20 6 0	...	99 5 0	1,230 14 7	508 9 6
18. Sale of dry and decayed trees	1,075 13 0	713 1 6	1,357 9 6	384 9 3	156 10 3	301 2 0
19. Confiscated wood	6 13 3	2 2 0	...			9 2 0
20. Fines	0 11 0	0 2 0	...	...	...	...
21. Miscellaneous	...	610 5 3	...	...	497 9 6	296 4 10
Grand Total ...	40,983 15 6	20,036 1 10	6,411 11 0	25,834 7 11	33,495 4 7	15,807 6 6

FORESTS.

APPENDIX C.—*Statement showing the working of the Forest Rules*

District.	District Forest Acres.			Passes granted under Rule I.				Passes granted under Rule II.				Passes granted under Rule III.				Passes granted under Rule IV.				Passes granted under Rule V.				Passes granted under Rule VI.			
	Reserved.	Unreserved.	Total.	Area in which granted.	Officer granting.	No. granted.	Amount realised.	Area in which granted.	Officer granting.	No. granted.	Amount realised.	Area in which granted.	Officer granting.	No. granted.	Amount realised.	Area in which granted.	Officer granting.	No. granted.	Amount realised.	Area in which granted.	Officer granting.	No. granted.	Amount realised.	Area in which granted.	Officer granting.	No. granted.	Amount realised.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
							Rs. a. p.								Rs. a. p.								Rs. a. p.				Rs. a. p.
Amraoti	26,268	62,672	88,940	...	...	...	...	..	...	...	...	...	...	...	...	.	..	...	...	18,748	Patel.	417	354 14 0	1,055	Patel.	6	1 6 0
Akola	49,233	81,898	131,131	...	...	...	...	...	...	...	...	5,106	Forester and Patel.	72	357 3 0	...	...	...	...	53,236	Patels.	680	388 3 3	154	Patels.	14	20 6 0
Ellichpur ...	4,491	24,663	29,154	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Buldana	5,132	188,903	194,035	...	Forester.	83	1,914 4 2	...	...	...	...	...	Forester and Patels.	1,057	1,967 2 6	...	...	...	...	...	Forester and Patels.	688	668 6 0	...	Patels.	62	99 5 0
Wun	70,652	472,302	542,954	...	Tahsildar.	...	2,683 6 1	...	...	...	...	...	...	...	...	.	...	...	...	...	...	.	...	...	Tahsildar.	...	1,230 14 7
Basim	25,383	453,757	479,140	...	...	...	...	25,383	Deputy Commissioner.	13	769 6 3	453,757	Tahsildar and Patels.	2,129	3,486 1 0	..	...	...	...	453,757	Tahsildar and Patels.	2,271	749 14 3	453,757	Patels.	240	508 9 6
Total	181,159	1,284,195	1,465,354	..	...	83	4,597 10 3	25,383	...	13	769 6 3	458,863	...	3,258	5,810 6 6	...	...	...	...	525,741	...	4,056	2,161 5 6	454,966	...	322	1,860 9 1

FORESTS.

APPENDIX D.—*Expenditure incurred by District Officers during* 1882-83.

	Amraoti.	Akola.	Ellichpur.	Buldana.	Wun.	Basim.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Percentage to village officers for collecting grazing dues...	1,173 0 0	...	106 2 3	2,153 0 2	2,852 6 3	...
Do. do. revenue on fruits ...	265 1 0	...	...	218 7 3		
Do. do. revenue on minor forest produce ...	...	...	8 4 1	...	...	...
Do. do. passes under Rule I. ..	...	...	...	...	...	...
Do. do. do. Rule II..	...	...	...	...	...	471 7
Do. do. do. Rule III.	...	...	...	205 4 11	...	...
Do. do. do. Rule IV.	...	...	...	...	...	...
Do. do. do. Rule V..	61 5 6	...	...	...	...	...
Do. do. do. Rule VI.		...	...	...	...	...
Total ...	1,439 6 6	...	114 6 4	2,576 12 4	2,852 6 3	471 7
I.—Timber and other produce removed from the Forests by Government agency :—						
a. Timber	...	...	...	...	...	...
b. Firewood and charcoal..	...	...	...	...	...	...
c. Bamboos	...	...	...	...	...	...
d. Sandalwood ...	...	...	...	...	...	...
e. Grass and other minor produce	...	...	...	...	...	...
II.—Timber and other produce removed from the forests by consumers or purchasers ...	...	112 10 6	290 8 0	28 5 0	122 1 6	3 0 0
III.—Confiscated, drift and waif wood.	...	...	...	...	...	...
IV.—Revenue from forests not managed by Government :—						
a. Duty on foreign timber and other forest produce	...	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...	...
V.—Rent of leased forests and payments to shareholders in forests managed by Government ...	...	...	...	...	...	...
VI.—Live stock, stores, tools and plant :—						
a. Purchase of cattle ...	...	...	...	...	...	...
b. Feed and keep of cattle..	...	...	...	...	...	...
c. Stores, tools and plant...	4 15 0	1 8 0	...	...	5 0 0	...
VII.—Communications and buildings :—						
a. Roads and bridges ...	...	...	...	...	...	...
b. Buildings	...	...	...	...	...	...
c. Other works ...	...	...	...	...	...	...
VIII.—Demarcation, improvement and extension of forests :—						
a. Demarcation ...	...	...	...	...	...	...
b. Compensation for land and rights ...	...	...	...	...	...	...
c. Surveys and working plans	...	...	...	...	...	...
d. Plantations ...	140 12 2	...	40 2 0	...	...	...
e. Protection from fire ...	...	...	...	90 0 0	...	42 2 0
f. Other works ...	30 0 0	192 9 6	10 2 0	166 6 0	...	20 0 0
IX.—Miscellaneous :—						
a. Refunds	142 7 0	182 7 0	...	...	...	1 0 0
b. Law charges ...	...	...	...	...	...	...
c. Other charges ...	...	0 3 0	...	...	...	...
I.—Salaries :—						
a. Conservators ...	...	...	...	...	...	...
b. Superior Officers ...	...	...	...	...	...	...
c. Subordinate forest and depôt establishments...	922 9 10	1,110 0 0	420 0 0	816 0 0	1,238 12 11	935 6 10
d. Office establishments ..	...	...	...	...	...	...
e. Deputation and special allowances ...	...	...	...	...	...	...
II.—Travelling allowances :—						
a. Conservators ...	...	...	...	...	...	...
b. Superior Officers ...	...	...	...	...	...	...
c. Subordinate forest and depôt establishments...	...	3 15 11	...	...	22 4 1	...
d. Office establishments ...	...	...	...	...	...	...
III.—Contingencies :—						
a. Stationery	...	0 8 0	3 0 0	...	...	...
b. Carriage of tents & records	...	...	...	...	...	...
c. Rents, rates and taxes ...	...	...	...	...	...	...
d. Pay of police guards ...	...	...	...	...	...	...
e. Official postage ...	...	...	...	...	...	...
f. Sundries	...	0 14 0	...	...	1 6 5	...
Total ...	1,240 12 0	...	763 12 0	1,100 15 0	1,389 8 11	1,001 8 10
Grand total of expenditure ...	2,680 2 6	1,604 11 11	878 2 4	3,677 7 4	4,241 15 2	1,473 0 0

FORESTS.

APPENDIX E.—*Produce exported from Forests managed directly by Forest Officers.*

Forest Divisions.	Description of produce.	Karas or two-bullock dragging load.	Cart load.	Camel load.	Bullock, pony, or donkey load.	Head load.	Bundles.	Number.	Cubic feet of solid wood.	Weight in lbs.	Value in Rs.	Total per Budget head.	Budget head.
	State Forests.												
Melghat Division.	Teak, tewas, and sheshum removed by Government agency ...	5,021	...	...	...	3	...	...	17,574	...	5,021	5,092	I. a.
	Other woods do. do. ...	141	...	...	...	...	...	...	493	...	71		
	Bamboos do. do. ...	...	...	...	...	...	...	100	...	...	25	25	I. c.
	Teak, tewas, and sheshum removed by purchasers ...	1,007	...	...	...	507	...	...	3,746	...	1,071	1,401	II. a.
	Other woods do.	642	...	...	...	149	...	...	2,313	...	330		
	Bamboos do.	...	...	...	...	...	...	1,609,895	...	...	16,098	16,098	II. c.
	Lac do.	...	...	...	1	59	...	...	...	3,173	23	166	II. e.
	Roots and fruits do.	...	1	1	555	5	...	...	...	59,795	142		
	Minor produce do.	...	...	...	...	4	...	...	...	208	1		
	Confiscated wood	...	...	...	...	...	...	...	...	...	135	135	III.
	Miscellaneous	...	...	...	...	...	...	...	...	...	106	106	V.
	Total ...	6,811	1	1	556	727	...	1,609,995	24,126	63,176	23,023	23,023	
Amraoti Ranges.	Timber of kinds removed by purchasers	...	165	...	97	2,221½	...	...	3,452	...	583	583	II. a.
	Firewood	...	4,060	...	3,343	20,352	...	...	168,518	...	2,451	2,451	II. b.
	Grass	...	1,607	...	38,807	38,470	...	...	...	4,800,055	3,099	9,773	II. d.
	Grazing	...	...	...	...	...	...	...	...	...	6,674		
	Minor produce	...	17	...	3	3,307	...	...	...	186,559	127	127	II. e.
	Confiscated wood	...	...	...	...	...	...	...	...	...	8	8	III.
	Miscellaneous	...	...	...	...	...	...	...	...	...	2	2	V.
	Total ...	...	5,849	...	17,249	64,350½	...	...	171,970	4,986,614	12,944	12,944	
South Berar Division.	Timber removed by purchasers	...	50½	...	...	...	...	...	6,472	...	1,075	1,075	II. a.
	Firewood	...	1,151	16	331	...	...	...	16,705	...	538	538	II. b.
	Grass	...	...	...	...	...	...	...	...	6,217,785	1,726	1,726	II. d.
	Minor produce	...	...	...	...	...	...	...	...	...	12	12	II. e.
	Confiscated wood	...	...	...	...	...	...	...	...	...	...	...	...
	Miscellaneous	...	...	...	...	...	...	...	...	...	147	147	V.
	Total ...	...	1,201½	16	331	...	...	...	23,177	6,217,785	3,498	3,498	
Wun Division.	Timber removed by purchasers	249	...	...	...	...	...	...	290	...	63	63	II. a.
	Firewood	1	1	...	...	...	...	...	...	160	1	1	II. b.
	Bamboos	...	...	...	...	...	...	37,100	...	...	371	371	II. c.
	Grass	...	9,775	...	...	...	...	...	...	8,211,000	1,858	1,858	II. d.
	Confiscated wood	...	...	...	...	...	...	...	...	...	3	3	III.
	Miscellaneous	...	...	...	...	...	...	...	...	...	11	11	V.
	Total ...	250	9,776	...	...	...	...	37,100	290	8,211,160	2,307	2,307	
	Total of State Forests ...	7,061	16,827½	17	18,136	65,077½	...	1,647,095	219,563	19,478,735	41,772	41,772	
	Unreserved Forests.												
Melghat Division.	Teak, tewas, and sheshum removed by purchasers	35,660	...	...	...	70,772	...	...	155,563	...	44,446	64,823	II. a.
	Other woods	35,282	...	...	...	43,772	...	...	142,640	...	20,377		
	Firewood	...	13,219	51	26,530	7,525	...	...	378,491	...	9,650	9,650	II. b.
	Bamboos	...	...	...	...	...	...	1,362,980	...	...	13,630	13,630	II. c.
	Grass	...	5,597	...	14,249	...	...	...	...	6,197,625	1,716	10,822	II. d.
	Grazing	...	...	...	...	...	...	...	...	...	9,106		
	Lac	...	2	...	7	292	...	...	...	18,045	127	3,261	II. e.
	Teak leaves	...	...	...	...	...	15,191	...	...	789,932	949		
	Roots and fruits	...	174	2	4,176	14,662	...	...	...	1,347,930	2,124		
	Gum	...	6	...	1	20	...	...	...	5,765	22		
	Minor produce	...	1	...	11	13½	...	...	...	8,937	39		
	Confiscated wood	...	...	...	...	...	...	...	...	...	128	128	III.
	Miscellaneous	...	...	...	...	2	...	...	...	...	7	7	V.
	Total of Unreserved Forests ...	70,882	18,999	53	46,994	137,177	15,191	1,362,980	676,694	8,368,234	1,02,321	1.02,321	
	Grand Total ...	77,943	35,826½	70	65,130	202,254½	15,191	3,010,075	896,257	27,846,969	1,44,093	1,44,093	

FORESTS.

APPENDIX F.—*Cattle grazed in Forests managed by Forest Officers.*

Districts, &c.	Year.	Camels.	Buffaloes.	Cows and bullocks.	Sheep and goats.	Total.
Melghat Division. Melghat and Central Provinces	1881-82	...	5,752	22,114	5,389	33,255
	1882-83	1	5,588	23,297	5,301	34,187
Daryapur and Ellichpur Talukas of Ellichpur District	1881-82	145	5,900	40,205	20,177	66,427
	1882-83	51	5,176	33,257	27,043	65,527
Akola District ...	1881-82	136	4,454	30,156	6,700	41,446
	1882-83	67	4,124	29,040	6,855	40,086
Total ...	1881-82	...	...	...	...	141,128
	1882-83	...	...	...	...	139,800
Amraoti Range ...	1881-82	152	4,892	20,395	9,806	35,245
	1882-83	...	6,609	27,110	12,863	46,582

APPENDIX G.—*Timber and other produce exported from Forests managed by Forest Officers.*

Produce.		1881-82.			1882-83.		
Melghat Division.		C. ft.	No.	Rs.	C. ft.	No.	Rs.
Teak, &c.	State Reserves ...	21,285	...	4,875	21,320	...	6,092
	Unreserves ...	125,215	...	35,808	155,563	...	44,446
Other woods	State Reserves ...	434	...	95	2,806	...	401
	Unreserves ...	101,764	...	14,505	521,131	...	30,027
Bamboos	State Reserves ...	...	617,650	6,177	...	1,609,995	16,123
	Unreserves ..	...	1,035,600	10,356	...	1,362,980	13,630
Miscellaneous, grass, grazing, &c	State Reserves ...	...	...	370	...	...	407
	Unreserves ...	...	...	21,997	...	...	14,218
	Total ...	248,698	1,653,250	94,183	700,820	2,972,975	1,25,344
Amraoti Range.							
Teak, &c.	State Reserves ...	...	...	...	...	...	...
Other woods	Do.	174,395	...	2,585	171,970	...	3,034
Bamboos	Do.	...	...	...	...	...	...
Miscellaneous, grass, grazing, &c.	Do.	...	...	7,012	...	...	9,910
	Total ...	174,395	...	9,597	171,970	...	12,944
South Berar Division.							
Teak, &c.	State Reserves ...	...	...	...	6,472	...	1,075
Other woods	Do.	882	...	79	16,705	...	538
Bamboos	Do.	...	...	...	...	...	...
Miscellaneous, grass, grazing, &c.	Do.	...	...	890	...	...	1,885
	Total ...	882	...	969	23,177	...	3,498
Wun Division.							
Teak, &c.	State Reserves ...	1,981	...	526	290	...	63
Other woods	Do.	182	...	5	...	...	1
Bamboos	Do.	...	33,200	332	...	37,100	371
Miscellaneous, grass, grazing, &c.	Do.	..	...	1,063	...	...	1,872
	Total ...	2,163	33,200	1,926	290	37,100	2,307
	Grand Total ...	426,138	1,686,450	1,06,675	[illegible],257	3,010,075	1,44,093

FORESTS.

APPENDIX H.—*Meteorological observations made in Forests managed by Forest Officers.*

| Month. | Mean of Hygrometer. | | | | | | | | Mean of Thermometer. | | | | | | Rain-fall. | | | | | | | |

APPENDIX I.—*Statement of District Forests showing areas classified and still under classification.*

District.	Taluk.	Area of District Forests.		Percentage of column 3 on total area of khalsa villages.	Proposed classification of District Forests.										Head of cattle excluding sheep and goats.			Area of grazing per head of cattle.	
					Reserved State Forests.		Woods.		Grass lands.		Grazing lands.		Open forests available for the extension of cultivation.		Plough cattle.	Other cattle.	Total.	Ordinary on column 8.	Extraordinary on columns 5, 6, and 7.
1	2	3		4	5		6		7		8		9		10	11	12	13	14
		A.	G.		A.	G.	A.	G.	A.	G.	A.	G.	A.	G.					
Ellichpur	Ellichpur	27,931	1	10·	..		857	19	63	7	26,684	36	325	19	25,291	11,525	39,816	·67	·023
	Daryapur	8,239	20	3·	...		531	34	...		7,707	26	...		29,502	26,204	55,706	·14	·009
	Total	36,170	21	...	..		1,389	13	63	7	34,392	22	325	19	54,793	40,729	95,522	..	.
Amraoti	Morsi	71,953	23	18·	4,017	24	1,753	20	1,282	5	56,588	15	8,311	39	31,299	61,849	93,148	·61	·08
	Chandur	65,843	2	12·	6,630	33	1,413	10	676	5	53,594	20	3,528	14	46,340	66,647	112,987	·47	·008
	Amraoti	46,046	33	11·	1,161	21	2,106	7	7,532	27	32,535	25	2,713	33	35,284	39,999	75,283	·43	·14
	Murtazapur	34,980	0	9·	..		1,657	9	3,334	17	26,688	16	3,299	39	32,417	28,622	61,039	·44	·08
	Total	218,823	18	..	11,809	38	6,930	6	12,825	14	169,406	36	17,854	5	145,340	197,117	342,457		...
Wun	Darwha	215,669	8	40·	20,050	13	1,505	13	1,449	25	132,863	4	59,800	13	31,056	74,759	105,815	1·25	·22
	Kelapur	198,395	8	54·	41,734	8	172	37	4,111	35	75,156	26	77,219	22	16,060	44,919	60,999	1·23	·75
	Yeotmal	107,640	6	30·	32,476	14	847	10	500	0	62,980	18	10,834	4	23,843	44,655	68,498	·92	·49
	Wun	151,130	2	46·	3,886	23	72	30	17,434	32	73,387	32	56,368	5	16,289	29,778	46,067	1·59	·46
	Total	672,834	24	...	98,147	18	2,598	10	23,496	12	344,388	0	204,222	4	87,268	194,111	281,379	.	...
Basim	Mangrul	107,326	17	21·	9,018	4	964	9	241	1	78,573	33	18,529	10	32,838	28,995	61,833	1·27	·17
	Pusad	285,808	11	43·	64,362	30	304	34	1,768	15	220,584	5	58,645	21	30,731	46,607	77,338	2·85	·85
	Area classified in Basim	393,134	28	.	73,380	34	1,269	3	2,009	16	299,157	38	77,174	31	63,569	75,602	139,171	...	..
	Total area classified	1,320,963	11	...	183,638	10	12,186	32	38,394	9	847,345	16	299,576	19	350,970	507,559	858,529	..	..
Basim	Basim	94,498	24	15·	...		...		.		.		...		51,434	68,579	120,013	...	
	Total	487,633	12	...	...		.		.		...		...		115,003	144,181	259,184	...	...
Akola	Akot	8,898	34	3·	...		..		...				...		30,858	31,190	62,048	..	...
	Jalgaon	25,385	38	10·	.		.		.				...		21,171	27,660	48,831	...	..
	Balapur	53,385	26	15·	...		...		..				...		27,095	31,526	58,621	...	...
	Akola	60,115	22	13·	...		.						..		39,097	44,664	83,761	...	...
	Khamgaon	17,426	5	6·	..								.		24,835	20,993	45,828	...	...
	Total	165,222	5				...				...		.		143,056	156,033	299,089	...	..
Buldana	Malkapur	44,818	38	8·	.		.				...		...		44,726	47,086	91,812	...	.
	Ubikhli	114,590	18	18·	...		.		.		...		..		45,170	62,721	107,891	..	.
	Mehkar	135,392	14	22·	...		.				..		.		45,531	60,000	105,531	..	...
	Total	294,801	30	..	.						...		..		135,427	169,807	305,234	.	
	Total area unclassified	554,522	19	..	..		..		.		...		.		329,917	394,419	724,336		.
	Grand Total	1,875,485	30	...	.		...				...		...		680,887	901,978	1,582,865	...	..

FORESTS.

ANNUAL FORM No. 49.—*Area of Reserved Forests*, 1882-83.

Division or Range.	Civil district or territory	Name of forest.	Area on 1st April 1882. Acres.	Area on 1st April 1882. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1883. Acres.	Area on 31st March 1883. Equivalent in square miles.	No. and date of notification of addition or transfer.	Remarks.
		Demarcated State Forests.								
Melghat Division	Ellichpur District	Bairagarh Reserve	272,049	425	...	...	272,049	425	...	Published in *Hyderabad Residency Orders*, dated 20th March 1876.
		Gugamal do.	115,200	180	...	...	115,200	180	...	Do. do. do., 15th December 1882.
		Chikalda do.	2,400	4	...	...	2,400	4	...	
Amraoti Range	Amraoti do.	Amraoti Hills Reserve	49,847	78	...	...	49,847	78	...	
South Berar Division	Buldana do.	Garu Matergaon do.	45,992	72	...	...	45,992	72	...	Do. do. do., 15th March 1883.
		Amdari Reserve	...	...	13,717	...	13,717	21	...	Do. do. do., 15th February 1883.
	Buldana, Akola, Basim Districts.	Ghatbori do.	23,760	37	...	...	23,760	37	...	Do. do. do., 15th March 1883.
	Akola District	Mandwa do.	5,333	8	142	...	5,475	9	...	Do. do. do., 1st December 1882.
		Loni do.	911	1	...	3	908	1	...	Do. do. do., 15th March 1883.
		Bhongaon do.	1,368	2	...	...	1,368	2	...	Do. do. do., do.
	Basim do.	Penganga do.	11,575	18	...	...	11,575	18	...	Do. do. do., do.
		Rui do.	6,578	10	70	1	6,647	10	...	Do. do. do., 2nd January 1883.
	Do. do.	Kinwat do.	52,558	82	...	...	52,558	82	...	Do. do. do., 15th March 1883.
Wun Division	Wun do.	Kelapur do.	40,747	64	...	...	40,747	64	...	
		Gondwakri do.	16,347	26	12	...	16,359	26	...	
		Khorad do.	16,117	25	...	...	16,117	25	...	
		Pathroat do.	2,889	5	...	...	2,889	5	...	
		Anjankheir do.	7,589	12	55	...	7,634	12	...	
		Lonbehel do.	9,956	16	...	990	8,966	14	...	
		Teak tracts at Mangla, Renkapur, Dapura, Jalgaon, Aurangpur Reserve	153	...	...	...	153	...	...	
		Phiski Reserve	2,342	4	...	...	2,342	4	...	
		Tiwsala do.	3,596	6	...	3	3,593	6	...	
		Bhiokund do.	3,433	5	...	...	3,433	5	...	
		Krishnapur Reserve	3,933	6	...	...	3,933	6	...	
		District Reserved Forests.								
Direction Division	Ellichpur District	Ellichpur District	4,491	7	...	...	4,491	7	...	
	Amraoti do.	Amraoti do.	26,268	41	...	...	26,268	41	...	
	Akola do.	Akola do.	48,632	76	601	...	49,233	77	...	
	Buldana do.	Buldana do.	16,470	26	598	11,936	5,132	8	...	
	Wun do.	Wun do.	76,129	119	340	5,817	70,652	110	...	
	Basim do.	Basim do.	25,168	39	284	69	25,383	40	...	
		Total	891,821	1,394	15,819	18,819	888,821	1,389	...	

FORESTS.

ANNUAL FORM No. 49.—*Area of Unreserved Forests*, 1882-83.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1882. Acres.	Area on 1st April 1882. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1883. Acres.	Area on 31st March 1883. Equivalent in square miles.	No. and date of Notification of addition or transfer.	REMARKS.
	Unreserved Forests managed by Forest Officers.									
Melghat Division ...	Ellichpur District ...	Melghat Taluk ...	586,400	916	...	...	586,400	916		
		Ellichpur do. ...	5,815	9	...	...	5,815	9		
		Daryapur do. ...	1,591	3	...	...	1,591	3		
	Akola do. ...	Akot do. ...	1,460	2	...	...	1,460	2		
		Jalgaon do. ...	4,476	7	...	...	4,476	7		
Amraoti Range ...	Amraoti do. ...	Amraoti do. ...	4,048	6	...	...	4,048	6		
		Chandur do. ...	3,408	5	...	...	3,408	5		
	District Unreserved Forests.									
Direction Division ...	Ellichpur District ...	Ellichpur District ...	24,858	39	68	263	24,663	39		
	Amraoti do. ...	Amraoti do. ...	62,672	98	...	...	62,672	98		
	Akola do. ...	Akola do. ...	82,310	129	...	412	81,898	128		
	Buldana do. ...	Buldana do. ...	204,072	319	4,533	19,702	188,903	295		
	Wun do. ...	Wun do. ...	497,851	778	...	25,549	472,302	738		
	Basim do. ...	Basim do. ...	460,351	719	6,650	13,244	453,757	709		
		Total ...	1,939,312	3,030	11,251	59,170	1,891,393	2,955		

ANNUAL FORM No. 50.—*Area of Plantations*, 1882-83.

Division.	Name of Plantation.	On 1st April 1882. Area.	On 1st April 1882. Cost.	Added during 1882-83. Area.	Added during 1882-83. Cost.	On 31st March 1883. Total area.	On 31st March 1883. Total cost.	Remarks.
		Acres.	Rupees.	Acres.	Rupees.	Acres.	Rupees.	
	Regular Plantations Bairagarh Reserve.							
Melghat Division.	Pili	52	2,112	...	...	52	2,112	Teak.
	Rakiada... ...	13	2,163	...	...	13	2,163	Do. and bamboo.
	Sembodoh ...	2	28	...	...	2	28	Do. do.
	Dugapati ...	11	435	...	...	11	435	Do. do.
	Pipalcota ...	160	5,083	...	...	160	5,083	Do. do.
	Sooli	110	4,860	...	...	110	4,860	Do. do.
	Bujru	31	2,259	...	...	31	2,259	Do. do.
	Labu	279	3,972	...	...	279	3,972	Do.
	Saoli and Kurita ...	30	2,233	...	...	30	2,233	Do.
	Jambulwaree ...	600	4,325	...	...	600	4,325	Do.
	Abapur	120	5,072	...	...	120	5,072	Do. and bamboo.
	Kalkaz	1	822	...	205	1	1,027	Forest garden.
	Miscellaneous charges	...	132	...	139	...	271	
	Total regular plantations	1,409	33,496	..	344	1,409	33,840	
	Cultural operations.							
Melghat Division ...	Gugamal Reserve ...	...	...	...	37	...	37	Broadcast sowing.
South Berar Division ...	Loni do. ...	...	...	250	214	250	214	Sowing blanks with babul and prosopis.
	Bhongaon do. ...	...	...	347	209	347	209	Do. do.
Amraoti Range ..	Amraoti Hills ...	...	...	303	12	303	12	Sowing blanks with babul & tiwas.
Direction Division ...	Ellichpur District ...	...	...	...	40	...	40	Sowing avenues with babul.
	Amraoti do. ...	...	...	1	141	1	141	Nursery of fruit trees at Karanja for road side planting.
	Total cultural operations	...	...	901	653	901	653	
	Grand Total ...	1,409	33,496	901	997	2,310	34,493	

FORESTS.

ANNUAL FORM No. 51.—*Area of Forest tracts protected from fire during dry season*, 1883.

Division.	Forest tracts.	Up to 30th June 1882		During dry season of 1883.				Total cost up to 30th June 1883	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures	Actually protected.	Amount expended.			
		Acres.	Rs.	Acres.	Acres.	Acres.	Rs	Rs.		
Direction Division.	District Reserves	...	...	...	...	...	89	89	...	Miscellaneous expenditure.
Melghat Division.	Melghat, Bairagarh Reserve, Raipur block.	14,231	5,988	14,231	...	14,231	303	6,291	1870	
	Remainder of Reserve.	247,818	4,859	257,818	...	257,818	1,114	5,973	1872	
	Gugamal Reserve.	114,800	2,739	115,200	...	115,200	429	3,168	1877	
	Chikaldia Reserve	2,400	47	2,400	..	2,400	20	67	1880	
	Total ...	379,249	13,633	389,649	...	389,649	1,866	15,499		
Amraoti Range.	Amraoti Hills Reserve.	13,676	842	17,944	2,359	15,585	239	1,081	1881	
South Berar Division.	Garimatergaon Reserve.	44,142	2,869	45,992	3,800	42,192	502	3,371	1880	
	Ghatbori Reserve	21,720	2,021	29,235	1,235	28,000	267	2,361	1881	
	Mandwa do.	5,233	73							
	Penganga do.	11,575	1,578	11,575	1,280	10,295	120	1,698	1880	
	Loni and Bhongaon Reserve.	2,279	..	2,276	2	2,274	5	5	1882	
	Rui Reserve ...	6,420	25	6,647	402	6,245	88	113	1882	
	Total ..	91,369	6,566	95,725	6,719	89,006	982	7,548		
Wun Division.	Kinwat Reserve..	51,918	2,414	52,558	1,920	50,638	648	3,062	1881	
	Kelapur do.	14,080	702	40,747	20,429	20,318	549	1,251	1881	
	Patroat do	2,639	119	51,965	430	51,535	577	696	1882	
	Wun do.	...	...	13,301	7,392	5,909	296	206	1882	
	Total ...	68,637	3,235	158,571	30,171	128,400	1,980	5,215		
	Grand Total ..	552,931	24,276	661,889	39,249	622,640	5,156	29,432		

Charged in previous years	23,526
Do. 1882-83	5,124
Do. 1883-84	782
Total ...	29,432

ANNUAL No. 52.—*Prosecutions for breaches of Forest Rules during* 1882-83.

Forest Division and Civil District.	Cases pending from 1881-82.	Injury to forest by fire.	New cases of the year.				Total cases.	Disposed of during the year.						Cases pending at close of year.
			Unauthorized felling or appropriation of wood and minor forest produce	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total		
								Cases	Persons.	Cases	Persons	Cases	Persons.	
Ellichpur District ...	...	...	30	...	...	30	30	23	25	7	16	30	41	
Amraoti do. ...	...	...	16	3	8	27	27	20	24	7	9	27	33	
Akola do. ...	...	...	6	39	58	103	103	88	152	15	28	103	180	
Buldana do. ...	...	...	20	...	..	20	20	16	36	4	46	20	82	
Basim do. ...	..	...	30	...	2	32	32	28	33	4	11	32	44	
Wun do. ...	...	...	4	...	25	29	29	27	57	2	7	29	64	
Melghat Division.														
Reserved Forests ...	...	..	9	...	3	12	12	12	31	...	...	12	31	
Unreserved Forests...	...	...	5	6	126	137	137	122	207	15	56	137	263	
Amraoti Range ...	...	1	11	2	...	14	14	12	23	2	3	14	26	
South Berar Division														
Reserved Forests ...	...	...	3	...	5	8	8	6	12	2	2	8	14	
Wun Division.														
Reserved Forests ...	...	..	24	1	...	25	25	9	18	1	7	10	25	
Total ...	...	1	158	51	227	437	437	363	618	59	185	422	803	

FORESTS.

Annual Form No. 53.—*Summary of Revenue and Expenditure of the different Divisions during* 1882-83.

Budget Heads—Revenue.	Direction Division.	Melghat Division.	Southern Division.	Wun Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—*Timber and other produce removed from the forests by Government Agency:—*					
a. Timber	...	5,091 13 0	...	...	5,091 15 0
b. Firewood and charcoal	...	...	...	...	...
c. Bamboos	...	25 0 0	...	...	25 0 0
d. Sandal-wood	...	...	...	...	...
e. Grass and other minor produce	...	...	...	...	...
II.—*Timber and other produce removed from the forests by consumers or purchasers:—*					
a. Timber	7,958 10 9	66,224 6 6	1,074 13 0	63 0 0	75,320 14 3
b. Firewood and charcoal	10,299 2 2	9,649 10 0	538 7 3	1 0 0	20,488 3 5
c. Bamboos	898 7 9	29,728 13 6	...	371 0 0	30,998 5 3
d. Grazing and fodder grass	1,17,364 9 7	10,821 15 6	1,725 10 3	1,858 3 0	1,31,770 6 4
e. Other minor produce	16,117 8 7	3,427 7 0	12 0 0	0 7 6	19,557 7 1
III.—*Confiscated, drift and waif wood:—* ...	1,764 0 9	262 13 3	0 7 0	2 8 0	2,029 13 0
IV.—*Revenue from forests not managed by Government:—*					
a. Duty on foreign timber and other forest produce	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...
V.—*Miscellaneous —*					
a. Fines and forfeitures	0 13 0	..	...	...	0 13 0
b. Refunds	2 15 6	95 3 8	8 0 0	13 1 11	119 5 1
c. Other sources	1,120 11 0	381 9 6	138 7 3	0 4 0	1,640 15 9
Total Revenue ...	1,55,526 15 1	1,25,708 11 11	3,497 12 9	2,309 8 5	2,87,043 0 2

Summary of Revenue and Expenditure.

Budget Heads—Expenditure.	Direction Division.	Melghat Division.	Southern Division.	Wun Division	Total.
A.—Conservancy and Works	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p
I.—*Timber and other produce removed from the forests by Government Agency:—*					
a. Timber	...	289 11 0	366 1 0	...	655 12 0
b. Firewood and charcoal	1 11 0	...	...	...	1 11 0
c. Bamboos	...	20 5 0	...	...	20 5 0
d. Sandal-wood	...	...	...	...	...
e. Grass and other minor produce	...	...	...	...	...
II.—*Timber and other produce removed from the forests by consumers or purchasers*	8,009 4 7	2,427 9 1	0 4 0	...	10,437 1 8
III.—*Confiscated, drift and waif wood* ...	...	...	...	...	.
IV.—*Revenue from forests not managed by Government —*					
a. Duty on foreign timber and other forest produce	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...
V.—*Rent of leased forests and payments to shareholders in forests managed by Government* ...	...	17,119 12 0	...	...	17,119 12 0
VI.—*Live stock, stores, tools and plant:—*					
a. Purchase of cattle	...	...	...	...	...
b. Feed and keep of cattle	1,180 10 3	815 11 6	840 14 6	...	2,837 4 3
c. Stores, tools and plant	604 9 7	215 15 2	15 10 0	98 9 0	934 11 9
VII.—*Communications and buildings:—*					
a. Roads and bridges	...	7,162 9 10	126 14 6	148 2 0	7,437 10 4
b. Buildings	47 0 0	710 14 5	261 1 0	130 12 0	1,149 11 5
c. Other works	1 9 0	191 9 0	...	...	193 2 0
VIII.—*Demarcation, improvement, and extension of forests:—*					
a. Demarcation	...	145 14 0	463 3 6	624 11 3	1,233 12 9
b. Compensation for land and rights ...	15 0 0	...	250 8 0	...	265 8 0
c. Surveys and working plans	.	5,388 13 5	...	...	5,388 13 5
d. plantations	193 5 2	381 3 0	423 0 0	...	997 8 2
e. Protection from fire	460 4 6	1,852 14 1	1,031 0 10	1,779 6 9	5,123 10 2
f. Other works	522 5 6	569 9 6	...	...	1,091 15 0
IX.—*Miscellaneous.—*					
a. Refunds	498 8 9	...	...	...	498 8 9
b. Law charges	...	...	...	...	...
c. Other charges	1,490 7 7	1,498 13 0	13 15 11	438 1 0	3,441 5 6
Total A.—Conservancy and Works...	13,024 11 4	38,791 4 0	3,795 9 3	3,219 10 0	58,828 3 2

FORESTS.

ANNUAL FORM No. 53.—*Summary of Revenue and Expenditure of the different Divisions*, 1882-83.

Budget Heads—Expenditure.	Direction Division.	Meighat Divison	Southern Division.	Wun Division.	Total.
	Rs. a. p	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought over Total A.—Conservancy and Works ...	13,024 11 11	38,791 4 0	3,792 9 3	3,219 10 0	58,828 3 2
B.—ESTABLISHMENT.					
I.—Salaries—					
a. Conservators	11,393 5 4	...	...	...	11,393 5 4
b. Superior Officers	6,873 13 10	7,441 14 11	6,000 0 0	5,453 3 7	25,769 0 4
c. Subordinate Forest and Depot Establishments.	7,224 11 11	13,936 11 8	4,434 8 4	4,688 1 11	30,284 1 10
d. Office Establishments	3,956 7 0	3,731 14 1	1,290 9 6	1,014 2 2	9,990 0 9
e. Deputation and special allowances ...	...	...	...	...	...
II.—Travelling Allowances—					
a Conservators	1,078 8 0	...	...	...	1,078 8 0
b. Superior Officers	1,218 6 0	1,568 9 7	1,551 0 0	1,448 6 0	5,786 5 7
c. Subordinate Forest and Depot Establishments.	26 4 0	...	...	13 14 5	40 2 5
d. Office Establishments...	274 3 0	302 5 9	271 4 7	191 9 1	1,039 6 5
III.—Contingencies—					
a. Stationery	147 10 6	99 7 6	12 10 0	27 14 0	287 10 0
b. Carriage of tents and records	795 7 8	857 1 11	441 1 0	437 2 6	2,530 13 1
c. Rents, rates and taxes	360 0 0	400 0 0	...	...	760 0 0
d. Pay of police guards...	...	...	...	...	...
e. Official postage	341 14 6	290 4 0	105 13 0	78 6 6	816 6 0
f. Sundries	909 13 4	292 2 9	94 11 10	74 6 8	1,371 2 7
Total B.—Establishments ..	34,600 9 1	28,920 8 2	14,201 10 3	13,424 2 10	91,146 14 4
Grand Total of all expenditure ...	47,625 5 0	67,711 12 2	17,994 3 6	16,643 12 10	1,49,975 1 6

ANNUAL FORM No. 54.—*Account Current for the year* 1882-83.

	Rs. a p.	Rs a. p		Rs. a. p	Rs. a. p.
To Cash Balance ...	2,207 6 5		By 3.—*Refunds and drawbacks* (Revenue refunds—Forests)	...	—
„ *III.—Forest*	2,87,043 0 2		„ 5.—*Forests*	1,49,975 1 6	
„ *Service Funds* ...	158 8 0		„ A—3.—Contributions from Provincial to Local ...	*a.* 576 8 0	
„ *Deposits*	...		„ *Deposits*	...	
„ *Forest Cash Remittances, Local:—*			„ *Forest Cash Remittances Local:—*		
Forest cheques drawn ...	1,52,118 12 10		Remittances to treasuries ...	2,86,377 10 6	
Inter-divisional transfers .	...	4,41,527 11 5	Inter-divisional transfers ...	...	
„ *Advances recoverable* ..	34,725 5 4		Cancelled cheques ...	124 1 0	
„ *Permanent advances* ...	1,200 0 0		„ *Advances recoverable* ...	38,899 15 10	
„ *Suspense*	...		„ *Suspense* ..	...	
„ *Account Current (other Governments)* ...	1,482 10 8		„ *Account Current (other Governments)* ..	...	
„ *Inter-departmental transfers*	...		„ *Inter-departmental transfers*	479 0 0	
„ *Miscellaneous advances, Civil*	177 5 0	37,585 5 0	„ *Cash Balance* ...	2,680 11 7	4,79,113 0 5
Total ...		4,79,113 0 5	Total ...		4,79,113 0 5

a. Moiety of cost of sinking a well at Basah originally debited to 5—Forests and subsequently transferred to P. W Department.—Adjusted to the debit of this head with reference to P. W. Examiner's No. 138, dated 17th January 1883.

FORESTS.

FORM No. 55.—*Outstandings and liabilities on account of Contractors and Disbursers for* 1882-83.

Division.	Department—debtor.			Department—creditor.			Balance due.	
	At commencement of the year.	Recoveries in cash and value of supplies and work done during year.	At close of year.	At commencement of year.	Payments made during year.	At close of year	To department (outstandings.)	By department (liabilities.)
	Rs.	Rs. a p	Rs. a. p	Rs. a. p	Rs a. p	Rs. a. p.	Rs. a. p	Rs.
Direction.	...	16,752 0 10	16,752 0 10	7,416 7 4	20,008 0 10	27,424 8 2	10,672 7 4	...
Melghat...	...	7,959 11 8	7,959 11 8	4,552 12 1	8,772 13 3	13,325 9 4	5,365 13 8	...
Southern..	...	5,069 5 7	5,069 5 7	430 15 11	5,309 0 0	5,739 15 11	670 10 4	...
Wun ...	...	4,944 3 3	4,944 3 3	838 12 0	4,810 1 9	5,648 13 9	704 10 6	...
Total...	...	34,725 5 4	34,725 5 4	13,238 15 4	38,899 15 10	52,138 15 2	17,413 9 10	...

FORM No. 56.—*Revenue received and outstandings on account of revenue during* 1882-83.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total	Amount realized during year.	Balance due to the Department at end of year	Remarks.
		Rs.	Rs. a p	Rs. a. p	Rs. a. p.	Rs	
Direction ...	Timber and other produce...	...	1,55,526 15 1	1,55,526 15 1	1,55,526 15 1	...	
Melghat ...	Do. ...	...	1,25,708 11 11	1,25,708 11 11	1,25,708 11 11	...	
South Berar	Do. ...	...	3,497 12 9	3,497 12 9	3,497 12 9	..	
Wun ...	Do. ...	...	2,309 8 5	2,309 8 5	2,309 8 5	...	
	Total ...	..	2,87,043 0 2	2,87,043 0 2	2,87,043 0 2	..	

FORM No. 57.—*Financial results of the year* 1882-83.

Division.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvement of forests	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs	Rs.	Rs	Rs.	Rs.	Rs	Rs	
Direction Division ...	...	2	1,55,527	37,288	10,336	1,55,527	47,626	
Melghat do. ..	5,117	310	1,20,592	43,510	23,891	1,25,709	67,711	
South Berar do. ...	...	366	3,498	11,308	6,320	3,498	17,994	
Wun do ...	...	...	2,309	10,580	6,064	2,309	16,644	
Total ...	5,117	678	2,81,926	1,02,686	46,611	2,87,043	1,49,975	

FORESTS.

Annual Form No. 58.—*Trees felled by Government Agency during the year* 1883-84.—(*Selection fellings.*)

Division.	Trees felled.		Remarks.
	Description.	Number.	
Melghat Division ...	Teak, &c.	1,683	Felled in Bairagarh Reserve.
South Berar Division ...	Babul	17,455	Felled in Loni and Bhongaon Reserves.
	Other kinds ...	733	
	Total ...	18,188	
	Grand Total ...	19,871	

Annual Form No. 63.—*Timber and other produce cut, collected, and removed from the Forests by consumers or purchasers, including pasture, during the year* 1882-83.

Division.	Produce removed.			Amount of revenue.	Account actually realized during the year.	Remarks.
	Description.		Number or quantity.			
				Rs.	Rs.	
Direction Divisio ...	Timber		...	7,375	7,375	II. a.
	Firewood		...	7,848	7,848	II. b.
	Bamboos		...	899	899	II. c.
	Grass		...	1,07,592	107,592	II. d.
	Minor produce		...	15,991	15,991	II. e.
	Total Revenue II. ...		...	1,39,705	1,39,705	
Amraoti Range ...	Timber of kinds	C. ft.	3,452	583	583	II. a.
	Firewood	,,	168,518	2,451	2,451	II. b.
	Grass	lbs.	4,800,055	3,099	3,099	II. d. = 9,773,
	Grazing cattle	Nos.	46,582	6,674	6,674	
	Minor produce	lbs.	186,559	127	127	II. e.
	Total Revenue II. ...		...	12,934	12,934	
Melghat Division ...	Teak, tewas, and sheshum ...	C. ft.	159,309	45,517	45,517	
	Other woods	,,	144,953	20,707	20,707	
	Total Timber ...	C. ft.	304,262	66,224	66,224	II. a.
	Firewood	C. ft.	378,401	9,650	9,650	II. b.
	Bamboos	Nos.	2,972,875	29,728	29,728	II. c.
	Grass	lbs.	6,197,625	1,716	1,716	
	Grazing Camels	Nos.	119	30	30	
	,, Buffaloes... ...	,,	14,888	1,861	1,861	II. d. = 10,822,
	,, Cows and Bullocks...	,,	85,994	5,990	5,990	
	,, Sheep and Goats ...	,,	39,199	1,225	1,225	
	Total Grazing ...		139,800	9,106	9,106	
	Lac	lbs.	21,218	150	150	
	Teak leaves	,,	789,912	949	949	
	Fruit	,,	1,407,725	2,266	2,266	
	Gum	,,	5,765	22	22	
	Miscellaneous	,,	9,145	40	40	
	Total Minor Produce ...		2,223,785	3,427	3,427	II. e. = 3,427,
	Total Revenue II. ...		...	1,19,851	1,19,851	
South Berar Division...	Timber...	C. ft.	6,472	1,075	1,075	II. a.
	Firewood	,,	16,705	538	538	II. b.
	Grass	lbs.	6,217,785	1,726	1,726	II. d.
	Minor produce	,,	...	12	12	II. e.
	Total Revenue II. ...		...	3,351	3,351	
Wun Division ...	Timber	C. ft.	290	63	63	II. a.
	Firewood	,,	160	1	1	II. b.
	Bamboos	Nos.	37,100	371	371	II. c.
	Grass	lbs.	8,211,000	1,858	1,858	II. d.
	Total Revenue II. ...		...	2,293	2,293	
Total Revenue of Circle under II. ...			...	2,78,134	2,78,134	
			Total Form 53 ...	...	2,78,134	

FORESTS.

ANNUAL FORM No. 65.—*Abstract showing the value of live stock, stores, tools and plant, for the year* 1882-83.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year	Against the year.	
			Rs.			Rs.			
Direction Division.									
Surveying and other instruments.	21	...	...	21	...	...			
Tools	326	...	...	338	...	...			
Furniture	158	...	...	170	...	...			
Tents	9	...	1,830	9	...	1,830			
Miscellaneous stores ..	137	...	..	137	...	..			
Elephants	1	..	3,000	1	...	3,000			
Total ..	652		4,830	676	..	4,830	...	...	
Melghat Division.									
Surveying and other instruments.	18	...	...	16	...	...			
Tools	662	...	...	664	...	...			
Furniture	130	...	...	151	...	...			
Tents	6	...	1,076	6	...	1,076			
Bungalows	2	...	8,000	2	...	8,000			
Miscellaneous stores ...	212	...	...	211	...	...			
Elephant	1	...	1,283	1	...	1,283			
Bullocks	7	...	195	7	...	195			
Total ..	1,038	...	10,554	1,058	...	10,554	...	...	
South Berar Division.									
Surveying and other instruments.	6	...	...	6	...	...			
Tools	199	...	...	198	...	...			
Furniture	43	...	...	43	...	...			
Tents	9	...	622	9	...	622			
Miscellaneous stores ...	45	...	...	53	...	..			
Elephant	1	...	1,112	1	...	1,112			
Total .	303	...	1,734	310	...	1,734	...	...	
Wun Division.									
Surveying and other instruments.	26	...	...	26	...	...			
Tools	175	...	...	175	...	...			
Furniture	19	...	...	27	...	...			
Tents	3	...	581	3	...	581			
Miscellaneous stores ..	39	...	...	39	...	.			
Total ...	262	...	581	270	..	581	...	...	
	Total ...		17,699	Total		17,699	...	...	

A. T DRYSDALE,
Conservator of Forests,
Hyderabad Assigned Districts.

Extract from the Proceedings of the Resident at Hyderabad in the Revenue Department, No. 2469½, dated Hyderabad Residency, 22nd September 1883.

READ—

The Report of Forest Administration in the Hyderabad Assigned Districts for the year 1882-83.

RESOLUTION.

THE provincial income from this source shows an increase of Rs. 53,228* above that of last year; and though the number of prosecutions under the Forest Rules (437) has increased somewhat, it is hoped that this satisfactory result has been obtained without any interference with valued rights or old privileges of the inhabitants. As the construction of roads in the Melghat is being pushed on, it is probable that the sale of timber in that tract will continue to increase; but with regard to the extension of its grazing capabilities much depends on the success attending the schemes now set on foot for the storage of water in the hills. Other important topics connected with this branch of the administration have been laid before the Resident, and either been decided by him, or submitted for the orders of the Government of India. Amongst these are included a revised Code of Regulations for the management of the department, and also various schemes for rendering the grazing tracts in the districts of the plain more compact, and for reforming the mode in which grazing fees have been collected. The working of these reforms will, however, be the subject of next year's report, as they have only lately been introduced. And during the year under report there is little to note except the rise of income and the comparative immunity from loss by fire.

(By order,)

G. H. TREVOR,

Secretary for Berar.

* NOTE.—At the end of page 5 of the Report the Conservator gives Rs. 53,532 as the increase, but this is not correct.

No. 915 F., dated Fort William, the 13th December 1883.

From—A. MACKENZIE, Esq., C.S., Secretary to the Government of India, Home Department.

To—The Resident at Hyderabad.

I AM directed to acknowledge the receipt of the letter from your Secretary for Berar, No. 449 of the 3rd October last, forwarding the Report of Forest Administration in the Hyderabad Assigned Districts for the year 1882-83, with your Resolution thereon.

Areas.

2. The changes in the forest areas which have occurred during the year are as follow:—

Class of Forest.	Area of forests, in square miles.				Proportion of Forest Area to Total Area of province, in per cent.
	At the commencement of the year.	At the close of the year.	Increase.	Decrease.	
State Reserves	1,066	1,106	20	...	6·2
District Reserves ...	308	283	...	25	1·6
Unreserved Forests ...	3,030	2,955	...	75	16·7
Total ...	4,424	4,344	...	80	24·5

The changes under reserved forests are principally due to the transfer of the Amdari Forest from district to state reserves, and those in the unreserved forests to fluctuations in the area under cultivation. The reserves constituted up to date have all been demarcated.

Organization.

3. The new classification of the forest areas is still proceeding; it is noticed that it has been completed in 12 taluks, while 9 taluks had yet to be taken in hand at the close of the year. It is hoped that no time will be lost in completing the work as early as practicable. In the meantime the revised reorganization, which was referred to in paragraph 2 of the Government of India's orders on the Report for 1881-82, and under which the Divisional Forest Officers will be brought into suitable official relationship with the Deputy Commissioners of Districts, can no doubt be proceeded with. This subject is of special importance in a country like Berar, where the produce of the forests is, with few exceptions, required for the domestic wants of the people.

Letter No. 281 F., dated the 27th March 1883.

General protection.

4. The number of prosecutions for breaches of the forest rules has increased from 369 in 1881-82 to 437 in 1882-83; but no importance is attached to this fact, as fluctuations in this respect are always likely to occur.

Fire protection.

5. The following table exhibits the results of fire protection during the last three years:—

Year.	Area, in square miles.			Cost per square mile successfully protected, in Rupees.
	Attempted.	Failures.	Proportion of failures to area attempted, in per cent.	
1880-81	882	14	2	23
1881-82	936	72	8	28
1882-83	1,034	61	6	30

Although the results of fire protection are on the whole satisfactory, it is noticed that numerous fires have again occurred in connection with the burning of the fire lines. It is hoped that the accidents caused in this manner will be reduced to a minimum, by a more strict supervision of the establishment employed on the work of line burning.

The cost of fire protection per square mile has rapidly risen during the last three years, but, as long as the measures are followed by success, the expenditure is not more than appears justified.

Plantations.

6. The cultural operations have extended over 901 acres, which have been sown with the seed of various trees in ploughed strips 3 feet wide and 15 feet apart, the intervening spaces being also sown broadcast. In addition, 8,000 pounds of teak seed were sown broadcast in the Gugamal Reserve. It will be interesting to learn the results of this rough method of establishing plantations, as similar experiments made in the forests of the Central Provinces have not led to satisfactory results.

7. It is satisfactory to notice that the construction of roads in the Melghat Forests continues to receive attention, as well as that of tanks to provide water for the cattle which graze in these forests.

Financial results.

8. The financial results of the year, arranged according to the different classes of forests, are as follow :—

Class of Forest	Receipts.	Charges.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs
State Reserves	41,899	62,675	...	20,776
District Reserves	8,423	25,748	...	17,325
Unreserved Forests	2,36,721	61,609	1,75,112	...
Total ...	2,87,043	1,50,032	1,37,011	...

The deficit of the State Reserves is only one-half of what it was in 1881-82, and the Conservator hopes to see it soon disappear altogether. The deficit of the District Reserves is also less than it was in 1881-82.

9. The totals of Receipts and Charges compare as follow with those of previous years :—

Year	Receipts.	Charges.	Surplus.
	Rs	Rs	Rs
1878-79	2,85,670	1,07,350	1,78,320
1879-80	3,07,501	1,10,514	1,96,987
1880-81	2,66,556	1,28,969	1,37,587
1881-82	2,33,511	1,52,985	80,526
1882-83	2,87,043	1,50,032	1,37,011

In the orders on the Report for 1881-82 attention was drawn to the decline of the balance sheet, and it was asked that a full explanation of this fact should be given in the Report for 1882-83. His Excellency the Governor General in Council notices with satisfaction that a decided improvement has been effected during the year, the receipts having increased by Rs. 53,532, while the expenditure has, at the same time, been reduced by Rs. 2,953.

The temporary decline of the revenue and the increase in expenditure have also been explained by the Conservator; but it is noticed that he attributes in one case the falling off in the revenue from grass to a light fall of rain during the year, while in another case on the same page (7) he explains a similar decrease by a particularly favourable rain-fall. In one of these cases (probably the former) the explanation given does not hold good.

10. On the whole the Report shows that the progress of Forest Administration in Berar is satisfactory; and the increase in the revenue consequent on the construction of good and convenient roads in the Melghat Reserves is a point which deserves special mention.

No. 916 F.

COPY of the above letter, with a copy of the Report for 1882-83, forwarded to the Foreign Department for information.

Appendix shewing the discrepancies noticed in the Statements appended to the Report of Forest Administration in the Hyderabad Assigned Districts for 1882-83.

FORM No. 52.

(Prosecutions for breaches of Forest Rules.)

The number of cases pending at the close of the year (15) has not been given.

FORM No. 63.

(Timber and other produce cut, collected, and removed from the forests by consumers or purchasers.)

The "Total Revenue of Circle under II" is entered as Rs. 2,78,134, whereas Form No. 53 shews it to amount to Rs. 2,78,135.

Forms Nos. 53 to 56, relating to the monetary transactions of the Department, do not bear (as they should) the signature of the Comptroller, Hyderabad.

It would be desirable to bring the Forms generally more into accordance with those prescribed in the Forest Department Code.

H. B.—Home Department Press—No. 340—17-12-83—240.

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No. 6670 of 1884.

From

S. O. B. RIDSDALE, Esquire, C. S.,

Commissioner,

Hyderabad Assigned Districts,

To

The SECRETARY for BERAR to the RESIDENT,

Hyderabad.

Dated Amraoti, *22nd August* 1884.

Sir,

I have the honour to forward herewith the report of the Conservator of Forests on the administration of the Forest Department during the year 1883-84.

The report reached me on the 18th instant.

2. There appears to be but little of importance to record in the year's work.

The area of the district reserves has been increased from 283 square miles to 527 square miles, but this increase is nominal; it is merely the result of re-classification of the waste lands; no fresh appropriation of land has been made. Otherwise the forest areas have remained of much the same extent as reported last year.

3. The reserves, both State and district, have been well protected from fire, except in the case of the Kelapur Reserve in the Wun District, where the efforts of the Assistant Conservator have been singularly unsuccessful, resulting in three-quarters of the reserve, 30,000 acres, out of 40,000 being burnt down.

4. The reserves are left altogether to natural reproduction: no re-planting is attempted. They at present yield but little produce of any marketable value, and show a yearly excess of expenditure over revenue of between Rs. 30,000 to Rs. 40,000. They represent an investment of capital in the hope of future returns.

5. Of the total income of the department 81 per cent. is derived solely from the unreserved forests, or as they are barbarously termed in this report "unreserves," and is obtained principally from grass and grazing dues. Timber furnishes but a small proportion of the revenues of the Berar forests, 28 per cent.

6. On the whole, the working of the department from a financial point of view has improved, as it shows a net surplus of Rs. 1,51,678, an increase of Rs. 14,610 over last year's balance: the total revenue realized being higher than that reached in any preceding year.

7. The work of re-classifying the waste lands of each district with the view to regulating and improving the supply of grazing has been completed during the year, and schemes for the remaining nine taluks have been prepared. The orders of the Resident on the proposals for six taluks which have been submitted are awaited before submitting the remainder. Detailed rules for the management of these waste lands were prepared during the year and sanctioned by the Resident.

8. The scheme for giving each district its own Forest officer, who should work under the orders of the Deputy Commissioner, has been brought into operation from 1st April 1884, so far as officers have been available. Two officers of the grade of Sub-Assistant Conservators are still required for the districts of Akola and Buldana.

I am inclined indeed to think that the whole of the work of the Forest Department in this province, including the supervision of the State reserves

could be adequately performed by officers of this class, Sub-Assistant Conservators, attached to each district as assistants to the Deputy Commissioners under the general supervision and direction of the Conservator, and that the more expensive agency of Deputy Conservators and Assistant Conservators might be dispensed with, except perhaps in regard to the Melghat forests. A considerable gain in economy would result, with, I imagine, but little loss in efficiency of administration.

9. The work of opening out the Melghat with forest roads, which is a matter of much importance, has been effectively pushed on during the year, and existing roads have been maintained in working order. For the purpose of further utilizing these roads the Conservator lays much stress on the shortening of the roads between Chikalda and Ellichpur, and he asserts in para. 37, that if this road were shortened by 10 miles bamboos would then be brought out from the Gugumal reserve. I am, however, myself quite unable to understand how so small a difference as this in the total length of cartage, 10 miles out of 55 (Ellichpur-Chikalda 30 miles and Chikalda-Bandum 25) could have the slightest practical effect on the export of produce from the Gugumal reserve. The export traffic being all down hill, the additional ten miles represents only at the most four hours extra cartage, which surely cannot add any appreciable sum to the cost of the exported articles.

10. The postponement of the Kalamkar-Jiri road is much to be regretted in the interest of the opening up of the Melghat to traffic and civilization. An outlet on this western side is most urgently needed.

11. On the whole, the working of the department during the year appears to have been satisfactory, and its supervision by Mr. Drysdale has been effective and judicious.

I have the honour to be,

Sir,

Your most obedient servant,

S. O. B. RIDSDALE,

Commissioner,

Hyderabad Assigned Districts.

No. 240.

FROM

A. T. DRYSDALE, ESQUIRE,

Conservator of Forests,

Hyderabad Assigned Districts.

To

THE COMMISSIONER,

Hyderabad Assigned Districts.

DATED AMRAOTI, 25*th July* 1884.

SIR,

I HAVE the honour to submit the Progress Report of Forest Administration in the Hyderabad Assigned Districts for the year 1883-84.

INTRODUCTION.

Scheme for subordinating Forest Officers to Deputy Commissioners.

The scheme for making Forest Divisions coterminous with districts, and placing Divisional Forest Officers in subordination to Deputy Commissioners, has been matured during the year, but was not brought into force till the 1st April 1884. The procedure to be observed in the conduct of forest business under this scheme is shown in Appendix A. Owing to the paucity of Forest Officers, it has not yet been found possible to allot one officer to each district. If, however, the proposals made in my letter No. 704, dated 10th December 1883, for promoting the two senior Rangers to the rank of Probationary Sub-Assistant Conservator, and placing them in charge of the two districts of least importance from a forest point of view, be sanctioned, the scheme can be introduced in its entirety. In the meantime the following divisions have been formed as a temporary measure :—

(*a*). *Direction Division.*—Comprising in addition to the general management and control of the department, the charge of the district forests of Akola and Buldana.

(*b*). *Ellichpur Division.*—Comprising the charge of every description of forest in the Ellichpur District.

(*c*). *Amraoti Division.*—Comprising the charge of every description of forest in the Amraoti District.

(*d*). *South Berar Division.*—Comprising the charge of every description of forest in the Basim District (except the Kinwat Reserve) and of the State Reserves in the Buldana and Akola Districts.

(*e*). *Wun Division.*—Comprising the charge of every description of forest in the Wun District, and of the Kinwat Reserve in the Basim District.

When two more officers have been appointed, they will be posted to Akola and Buldana, and hold charge of every description of forest in these districts. The Direction Division will then be relieved of the charge of the District Forests in Akola and Buldana, and the South Berar Division of the State Reserves in the same districts, the latter division becoming the Basim Division, and taking over the Kinwat Reserve from the Wun Division. Each division will thus be made coterminous with a district, and be in charge of a separate Forest officer.

Divisional charges of the year under report.

2. During the year under report the divisions have remained the same as in the previous year, *viz.* :—

a. Direction.
b. Melghat.
c. Amraoti.
d. South Berar.
e. Wun.

The District Forests, with the exception of those in the Melghat and Amraoti Hills, which are attached to the Melghat and Amraoti Divisions respectively, are included in the Direction Division, and the State Reserves in the other divisions. The forests pertaining to each division are shown in detail in Form No. 49.

Changes in gazetted officers.

3. Mr. Bagshawe, Deputy Conservator of Forests on special duty in Berar, reverted to his substantive appointment in the North-West Provinces on the 26th May 1883, making over charge of the District Forest classification office to Mr. Prevost, Deputy Conservator of Forests, South Berar Division.

Mr. Stewart, Assistant Conservator of Forests, Wun Division, was transferred to the Bombay Presidency on the 7th June 1883, being relieved by Mr. Rind, Deputy Conservator of Forests, from the Central Provinces. Mr. Ballantine, Officiating Deputy Conservator of Forests, Melghat Division, proceeded on three months' privilege leave on the 27th August 1883. I held charge of the division during his absence.

Mr. Rasulkhan, Sub-Assistant Conservator of Forests, Melghat Division, was transferred to the Amraoti Division on the 28th August 1883.

CHAPTER I.—Area and Boundaries.

General remarks.

4. The changes that have taken place during the year in the classification of the forest area of the province are exhibited in the subjoined statement:—

Description of forest.	Area in square miles.				Percentage of forest area to area of the province.	
	On 1st April 1883.	Added during the year exclusive of inter-divisional transfers.	Excluded and transferred during the year exclusive of inter-divisional transfers.	On 31st March 1884.	On 31st March 1883.	On 31st March 1884.
State Reserves ...	1,106	2	...	1,108	6·8	6·8
District Reserves ...	283	244	...	527	1·7	3·2
Do. Unreserves ...	2,955	17	212	2,760	18·3	17·1
Total ...	4,344	263	212	4,395	27·0	27·3

The increase in State Reserves has occurred in the Amraoti Division, and is due to additions that have been made to the Amraoti Hills Range on the re-classification of the District Forests.

The increase in District Reserves is accounted for by the re-classification of the District Forests in Amraoti and Ellichpur, sanction to which was received during the year. All areas permanently reserved under this classification, as for example the "woods," "grasslands," and "grazing lands," have been shown as District Reserves, whilst the "open forests," or the areas allotted for the extension of cultivation, have been classed as Unreserves.

Variations in the area under cultivation are the main cause of the changes in District Unreserves.

Compared with last year the percentage of the different classes of forest to the area of the province remains the same for State Reserves, shows an increase of 1·5 for District Reserves, and a decrease of 1·2 for District Unreserves.

In the case of State Reserves only are special measures taken as regards demarcation. In the Melghat, to which tract the revenue survey has not been extended, the reserves are bounded by cleared lines forty feet broad with serially numbered pillars at convenient distances. No line cutting is, however, done in places where the reserves are sufficiently clearly demarcated by natural landmarks, such as roads, rivers, cliffs, and the like.

In the rest of Berar, which has been sub-divided into fields and blocks of waste land by the Revenue Survey Department, forty feet lines are also cleared round reserves, but serially numbered pillars are only erected to supplement the revenue survey pillars, and to render the boundaries more distinct.

The District Reserves and Unreserves are defined solely by revenue survey pillars.

Direction Division.

5. The area of District Reserves has increased from 181,159 acres to 337,277 in consequence of the re-classification of the District Forests in Ellichpur and Amraoti; whilst owing to the same cause, as well as to variations in land under cultivation in other districts, the area of District Unreserves has decreased from 1,284,195 acres to 1,170,589 acres.

The re-classification of the District Forests in 12 of the 21 taluks into which Berar, excluding the Melghat, is divided, was reported last year as having been completed. The work in the remaining nine taluks was finished by the end of March 1884, and the result is exhibited in Appendix B.

Of the 21 schemes sanction has as yet only been received to seven, *viz.*, those for the Ellichpur, Daryapur, Morsi, Amraoti, Chandur, Murtazapur and Yeotmal Taluks. Six are now before the Resident, *viz.*, those for the Basim, Mangrul, Pusad, Wun, Kelapur and Darwha Taluks; six are before the Commissioner, *viz.*, those for the Akola, Khamgaon, Balapur, Akot, Jalgaon and Malkapur Taluks; and two are with the Deputy Commissioner of Buldana; *viz.*, those for the Mehkar and Chikhli Taluks.

If all the schemes are sanctioned as they stand, and no changes made in them, the area of permanent forest land in the province will be—

	Acres.
Present area of State Forests	708,788
Area of District Forests re-classified in 1882-83, excluding land available for the extension of cultivation ...	1,021,387
Area of District Forests re-classified in 1883-84, excluding land available for the extension of cultivation ...	492,959
Total ...	2,223,134

or nearly 3,474 square miles, which is less by 526 square miles than the minimum area considered by the Inspector General of Forests as necessary to be set aside for the provincial supply of wood, grass, and other forest produce—*vide* para. 6 of his "suggestions regarding Forest Administration in the Hyderabad Assigned Districts, dated 1st May 1883." The area of land allotted for the extension of cultivation is 306,546 acres, or nearly 479 square miles.

Melghat Division.

6. The area of 7,406 acres shown in Form No. 49 as excluded from the unreserved forests of the Melghat has under the re-classification of the District Forests in Ellichpur been transferred to District Reserves.

The boundary lines of the Bairagarh, Gugumal and Chikalda Reserves have been cleared of undergrowth, and the pillars repaired at a cost of Rs. 320.

Amraoti Division.

7. The changes shown in the areas of State Reserves and Unreserves in the Amraoti Hills are due to the re-classification of the district forests. The reserves have been increased by 1,126 acres, and the unreserves decreased by 4,095 acres. The boundary lines of the reserves have been kept in good order at a cost of Rs. 170. The present pillars, which were hastily erected when the reserves were originally formed, are being replaced by new pillars on the Melghat pattern. The upper four feet of strong teak posts nine feet long are neatly dressed, and serial numbers cut on them about 1½ feet from the top. The lower portions are charred and tarred. The posts are then firmly fixed in the ground, two feet being buried. Cairns four feet high and having diameters at base of eight feet are afterwards heaped round the posts, of which then all that is visible above the cairns is three feet. Altogether 82 such pillars are being erected, and the work will be charged for in the accounts of next year.

South-Berar Division.

8. There are no variations to record in the areas of reserves in this division. All the boundaries are clear and well defined. The Amdari Reserve, which was taken up in 1882-83, has been demarcated at a cost of Rs. 399, whilst Rs. 124 have been expended in maintaining the boundary lines of other reserves.

Wun Division.

9. The areas of reserves remain unchanged.

The boundaries are now completely demarcated, and the following work is reported as having been done in connection with them :—

	Rs.
Clearing 57½ miles	482
Repairing 143 teak posts for pillars ...	331
Repairing pillars	86
Miscellaneous charges	237
Total ...	1,136

The arrangements made for the resuming of the inhabited village of Kapri, situated in the centre of the Kelapur Reserve, referred to in para. 54 of my Report for 1882-83, are to have effect from the 1st April 1884.

CHAPTER II.—Surveys, working plans, and annual plans of operations.

10. The following summary of work done during the year by the Forest Survey Department has been furnished by the Superintendent of Forest Surveys :—

Work done by Forest Survey Department.

"In the Melghat an area of 1,103 square miles has been triangulated, in which 1,078 stations have been fixed by three or more rays, and their heights above sea level are being computed. In 388 square miles of the above area, all the main streams, roads, forest, and village boundaries have been traversed with chain and compass, and numerical data have been computed for these items in the same terms as the triangulation. The linear distances traversed were :—

(a) Roads and streams	391	miles.
(b) Village and forest boundaries ...	198	,,
Total ...	589	,,

"All village boundaries that have been got ready for survey by the district authorities up to date have been traversed.

"No topographical surveying was attempted, as it was not possible to take up this branch of the work until a good basis of trigonometrical stations and the traversing of the main features were secured, but experimental surveys over a small area were made with a view to introducing the "tangent scale clinometer" into the operations of the Forest Survey Department for the purpose of laying down accurate contour lines on forest maps. The filling in of the topographical details in the area already triangulated and traversed will be commenced as soon after the rainy season as possible.

"The boundary surveys of the forests in South Berar were continued by a party of three native surveyors under the charge of an European surveyor. The party began work early in December, and after surveying the boundaries of

(1)	The Kinwat Reserve	80 miles
(2)	The Kelapur do. ...	76 ,,
	Total	156 ,,

it proceeded to the Melghat, where it joined the main survey camp in the beginning of February.

"In addition to 156 linear miles of boundary traversing, a length of 17 miles of road was surveyed, as well as the topography to the extent of five chains on either side, giving a total of 22·5 square miles of topographical work.

"Orders were received towards the end of January to take up the interior detailed survey of the South Berar Reserves, but as the season was then so far advanced, and as the South Berar survey party was already on its way to Ellichpur to take part in the general survey of the Melghat, it was considered advisable to postpone this work until the following field season."

Since the close of the survey field season the demarcation of villages in the Melghat has been steadily progressing, and during the rainy season the field demarcation of the black soil villages in the Bairagarh and Gugumal Reserves will be taken in hand. By the commencement of next survey field season it is expected that all the field and village demarcation connected with the State Reserves, which occupy an area of 609 square miles, will have been completed, and it will then be possible to employ the whole survey staff within this area while field and village demarcation in the Unreserved Forests is being rigorously pushed on

Annual plans of operations

11. Annual plans of operations are now drawn up for all divisions detailing the work to be done in each forest or description of forest during the year.

With few exceptions all work proposed for the year under report has been fully carried out.

CHAPTER III.—Protection and Improvement.

(1)—*Establishment.*

General remarks

12. The superior staff on the 1st April 1883 consisted of—

1 Conservator.	1 Assistant Conservator.
2 Officiating Deputy Conservators.	1 Sub-Assistant Conservator.

The subordinate establishment comprised:—

7 Rangers; 65 Foresters; 115 Guards.

The monthly maximum amount sanctioned for subordinate establishments was increased during the year from Rs. 3,375 to Rs. 3,446 by the appointment of a small office establishment costing Rs. 36 per mensem to the Amraoti Division, and of an additional Forester to the Amdari Reserve.

Now that the re-classification of the District Forests has been completed, I hope soon to be in a position to submit final proposals for the revision of the subordinate establishment, so as to render it in every way suitable for the work devolving upon it

(2.)—*General Protection and Breaches of the Forest Law.*

New Forest regulation for Berar

13 No orders have yet been received regarding the new Forest Regulation proposed for Berar. On a reference to the Inspector General of Forests, I find that the regulation is now before the Legislative Department of the Government of India, and it is hoped, therefore, that it may soon be passed.

Rules for the management of the District Forests under the new classification.

14. Rules for the management of the District Forests under the new classification have been framed during the year. A copy of the Rules is given in Appendix C

Prosecutions for breaches of Forest Rules.

15. The following statement shows the prosecutions made under the Forest Rules :—

	1882-83		1883-84.	
	Cases.	Convictions.	Cases.	Convictions.
State Forests ...	59 ..	39	75	61
District do. ...	378 ...	324	306 ...	253
Total ...	437	363	381	314

General remarks

The figures call for no particular remark. Compared with last year there has been a decrease of 56 in the number of cases, whilst the percentage of convictions remains about the same.

Melghat Division.

16. Of the 129 cases in this division, 16 were in connection with the reserves, and 113 had reference to the nakas.

The principal offences committed in the reserves were cooking food in unauthorized spots, carrying fire, and wrongful felling of wood. Fines were inflicted amounting in the aggregate to Rs. 199.

Of the naka cases 93 were for evading payment of dues. The fines awarded amounted to Rs. 456.

Amraoti Division.

17. There have only been 22 cases of breach of Forest Rules; three for unauthorized cutting of fuel, eight for grazing in closed tracts, and 11 for evading payment of dues The aggregate amount of fines inflicted was Rs. 235

(3).—*Forest fires.*

General remarks

18. Subjoined is a comparative statement of areas protected from fire It is abstracted from Form No. 51 :—

Division	Year	Protected.	Failures.	Cost.
Direction	1883	...		89
	1884	.		33
Melghat	1883	389,649		1,866
	1884	389,536	113	1,842
Amraoti	1883	15,585	2,359	239
	1884	13,071		537
South Berar	1883	89,006	6,719	982
	1884	105,802	3,640	1,241
Wun	1883	128,400	30,171	1,980
	1884	113,913	44,658	2,823
Total	1883	622,640	39,249	5,156
	1884	622,322	48,411	6,476

The area protected was less than that of the previous year by 318 acres, whilst the cost was Rs. 1,320 more. Per acre it amounted to less than two pies.

The return is prejudiced by the figures of the Wun Division, the only division in which marked success has not been attained.

Melghat Division

19. The following statement shows the areas protected in each reserve:

Reserve.	Year	Protected.	Failures.	Cost.
Bairagarh	1883	272,049		1,417
	1884	271,936	113	1,463
Gugumal	1883	115,200	...	429
	1884	115,200		368
Chikalda	1883	2,400		20
	1884	2,400	...	11
Total	1883	389,649		1,866
	1884	389,536	113	1,842

Only one fire occurred, burning 113 acres Its origin is not known. In the tract where it broke out, there happened to be a large number of bamboo cutters at work, who rendered immediate assistance, and extinguished the fire before it had time to spread to any great breadth

The insect that was reported to be doing considerable injury to teak seedlings does not appear to be increasing The attempt that was made to secure specimens of the insect to send to the Forest School for identification did not succeed. Another attempt will be made next year.

Amraoti Division.

20. There is but one reserve in this division to protect, and the results of fire conservancy compare favourably with those of last year Thus:—

Reserve	Year.	Protected	Failures.	Cost.
Amraoti Hills	1883	15,585	2,959	239
	1884	13,071		537

The difference in area is due to the re-classification of the District Forests when a portion of the land under rumnas was given up for grazing. The additional expenditure was caused by extra precautions that were taken to prevent the outbreak of fire, and also by the temporary establishment having had to be retained for the whole of the hot weather.

No reduction in establishment could be made, as was done last year, consequent on the large area of failures at the beginning of the season.

South Berar Division

21. Subjoined is a comparative statement of areas protected:—

Reserve	Year.	Protected.	Failures.	Cost
Gerumatergaon	1883	42,192	3,800	502
	1884	45,922	70	365
Ghatbori	1883	28,000	1,235	267
	1884	28,535	700	266
Pengagna	1883	10,295	1,280	120
	1884	10,375	1,200	139
Loni and Bhongaon	1883	2,274	2	5
	1884	2,276		
Rui	1883	6,245	402	83
	1884	5,027	1,620	176
Amdari ...	1883			
	1884	13,667	50	295
Total	1883	89,006	6,719	982
	1884	105,802	3,640	1,241

The increase in area and expenditure is due to the addition to the number of reserves.

Altogether 11 fires are reported to have taken place, burning in the aggregate 3,640 acres. Four of the fires are attributed to accidents, and seven to incendiarism

Wun Division.

22. The following statement shows the areas protected :—

Reserve.	Year.	Protected.	Failures.	Cost.
Kinwat	1883	50,638	1,920	648
	1884	51,152	1,406	983
Kelapur	1883	20,318	20,429	549
	1884	10,847	29,900	513
Darwha Range ..	1883	51,535	430	577
	1884	43,645	8,320	1,152
Wun do.	1883	5,909	7,392	206
	1884	8,269	5,022	175
Total	1883	128,400	30,171	1,980
	1884	113,913	44,658	2,823

The figures for 1884 compare unfavourably with those for the preceding year.

There have been 13 fires, and I regret to say no detections. The Divisional Officer ascribes the fires to accidents from people passing along roads or collecting minor produce, and also to incendiarism. There has again been a large amount of friction between the Forest Officer, Mr. Rind, and the civil authorities Like Mr Stewart, the previous Forest Officer, Mr. Rind complains of not being properly supported by the Deputy Commissioner, Colonel Szczepanski, whilst the latter considers that Mr. Rind has not shown sufficient consideration towards the inhabitants of villages surrounding reserves upon whom he is dependent for labour. A little tact on both sides is all that is, in my opinion, required to overcome present difficulties; but in the meantime it is much to be regretted that the reserves are being unnecessarily sacrificed. Fire conservancy in Wun should be attended with no more trouble than in other districts. In fact it should be simpler, as the area of waste land outside reserves is very large, and there is in consequence no scarcity of grazing ground as in other parts of Berar. It is to be hoped that the new arrangement of subordinating the Forest Officer to the Deputy Commissioner may cause both to work more in harmony for the future, and thus prove beneficial to forest interests. The Deputy Commissioner under this arrangement should be quite as much interested in the success of fire conservancy as the Forest Officer.

(4).—*Grazing and fencing.*

General remarks.

23. Grazing is prohibited in all State Reserves with the exception of those in the Melghat, where, however, it is confined to cattle belonging to the inhabitants of the reserves, and is in their case restricted to village limits. The number of cattle grazed in the unreserved forests of the Melghat, and in the grazing lands of the Amraoti Hills, which are in charge of the Forest Officers of the Melghat and Amraoti Divisions respectively, is shown in the following statement :—

Statement.

Division	District to which cattle belong.	Year.	Camels.	Buffaloes.	Cows and bullocks.	Sheep and goats.	Total.
Melghat.	Melghat-Ellichpur and Betul-Central Provinces	1882-83	1	5,588	23,297	5,301	34,187
		1883-84	6	6,173	22,282	4,673	33,134
	Daryapur and Ellichpur Taluks of Ellichpur ..	1882-83	51	5,176	33,257	27,043	65,527
		1883-84	116	6,317	41,043	39,987	87,463
	Akola ..	1882-83	67	4,124	29,040	6,855	40,086
		1883-84	5	3,943	34,133	6,867	44,948
	Total	1882-83					1,39,800
		1883-84					1,65,545
Amraoti.	Amraoti	1882-83		6,609	27,110	12,863	46,582
		1883-84		5,891	26,289	14,878	47,058

Construction of tanks.

24. Considerable progress has been made in the construction of tanks and anicuts in the Melghat and Amraoti Hills for the storage of water for cattle in years of drought.

The Executive Engineer has furnished me with the following particulars:—

"The tanks at Dhamangaon in the Melghat Hills and at Hirgowhan in the Amraoti Hills have been almost completed, while work on the following anicuts in the former tract has been commenced:—

1. Barudghat.
2. Barumtana.
3. Bori.
4. Chichkera.
5. Ghattang.
6. Mota.
7. Silona.
8. Sonapur.
9. Tekra.
10. Telghat.

"Of the above the following will be sufficiently finished to store a supply of water during the rains of 1884:—

1. Barudghat.
2. Bori.
3. Chichkera.
4. Ghattang.
5. Mota.
6. Silona.
7. Sonapur.

"The remainder will probably be completed by the end of the year."

(5).—*Natural reproduction.*

General remarks.

25. It has now been definitely proved that with successful fire conservancy and the exclusion of grazing, the natural re-production of our forests may be looked upon as a certainty, the only places requiring artificial measures, such as sowing or planting, to be adopted for the re-stocking of the ground being blanks devoid of seed-bearing trees.

Care will, however, have to be exercised to prevent the increase of useless descriptions of trees at the expense of others of more importance.

In special cases nature may require to be assisted either in the way of sowing or planting with a view to improving the composition of the forests, or by thinning in order to guard against valuable trees being overtopped and so injured or possibly killed by quicker growing trees of less importance.

Melghat Division.

26. Natural re-production is making rapid strides in the reserves of this Division. It is most marked in Bairagarh, as this reserve has a deeper and richer soil, is better wooded, and has been longer protected than either of the two other forests. Teak and tewas are the trees of which most seedlings are to be observed. They are fortunately the ones of greatest value and importance. 1,614 badly grown teak trees, and 208 trees of other descriptions were cut over with a view to securing healthy coppice from the stools. The shoots will not appear till the rainy season. The trees operated on in 1882-83 have coppiced well, only the very old ones having failed to throw up shoots.

27. Under this head Mr. Prevost writes: "Owing to the heavy monsoon of 1883 and to successful fire protection for the last three or four years, natural reproduction in all the reserves of my division is most marked, and young undergrowth is to be found everywhere. In the Penganga Reserve the number of healthy teak saplings from four to twelve feet high is astonishing. In no previous year have I noticed such a difference, and if only fires are kept out for a few more years, the ravines and plateaus will become thickly stocked. In Matergaon the spread of anjan (*Hardwickia binota*) is also most marked."

South Berar Division.

28. In continuation of the remarks made on the growth of anjan seedlings in para. 46 of my Report for 1882-83, Mr. Prevost notes:— "From observations carefully carried out in 12 distinct plots, it was ascertained that early in February 1883 the seedlings began to wither, and by the end of March had entirely lost their leaves. In April and May a few of the plants died, but when the rains commenced in June, the remainder burst into leaf. During the cold weather of 1883 the growth of the plants was very slow, so slow in fact as to be almost imperceptible. In February 1884 the plants again began to wither, and by the end of March were all leafless. It now remains to be seen what growth they will make during next rains and cold weather. These plants have already been watched for two years, having been regularly inspected twice a month, and as they were at least two or three years old when the experiment was first commenced, it is evident that in Berar the anjan is a most slow growing tree."

Growth of anjan seedlings.

29. Owing to the annually recurring fires in Wun, there is little improvement to record in the forests of this division. The Kinwat Reserve, which, however, is situated in the Basim District, is the only one in which natural reproduction is at all marked. It has been successfully protected from fire for several years. Teak, the most valuable tree in the forest, is confined to certain localities for the most part, and is only thinly scattered in other places.

Wun Division.

Unless nature is assisted, therefore, in the way of sowings, as was done at Mr. Brandis' suggestion in the years 1877 to 1880, it is improbable that this tree will be able to hold its own against others which are more numerous and more equally distributed. The sowings were stopped owing to the Divisional Officer's time being so much taken up with other work that he could not devote sufficient attention to them.

It was reported, too, that most of the young plants were destroyed by frost; but I am inclined to think that want of timely weeding had more to do with these failures than anything else.

When additional officers are appointed and forest divisions are reduced in size, the work should be again started, and pushed on vigorously as the area to be operated on is very extensive.

(6.) *Artificial reproduction.*

30. No extensions have been made to the regular plantations, although an expenditure of Rs. 253 has been incurred in the maintenance of the forest garden at Kolkaz in the Melghat Division. Cultural operations have been undertaken in the following areas. The figures are abstracted from Form No. 50:—

General remarks.

Division.	Area.		Cost.		Total.	
	On 1st April 1883.	Added during 1883-84.	On 1st April 1883.	On 31st March 1884.	Area.	Cost.
			Rs.	Rs.		Rs
Amraoti	303	330	12	489	633	501
South Berar	597	20	423	422	617	845

31. It is too soon to form any conclusions regarding the success of the broadcast sowing of teak in parts of the northern slopes of the Gugumal Reserve containing few seed bearing trees. As yet a very small percentage of the seed has germinated. There is, however, a fair sprinkling of seedlings on the ground.

Melghat Division.

Such sowings cost very little, and ought to prove more and more successful as fire conservancy becomes established, and the forest soil enriched.

32. The area said to have been sown with babul and other seeds in the Chiroree Block of the Amraoti Hills Reserve was, on being accurately measured, found to be 633 acres instead of 303 acres. The total expenditure incurred amounted to Rs. 501, or a little more than 12 annas an acre. Where the soil is deep, the sowings have proved a complete success, and the young plants are now over a foot high. In other places the plants have died down to the ground, but it is expected that many of them will throw up shoots as soon as the rains commence. As an additional precaution, however, the area of failures has been re-sown broadcast. A further area of about 500 acres has been selected to be operated on in the ensuing year.

Amraoti Division.

33. The sowings of babul on areas formerly under cultivation in the Purna Valley Babul Reserves have also met with marked success. Mr. Prevost writes regarding them: "After the first rains had fallen the whole ground was covered with a mass of seedlings, which continued to increase in number till the end of the monsoon. Towards the close of the cold weather a few plants appeared as if dead, but at the present moment there are more left than are required to re-stock the ground."

South Berar Division.

An additional area of 20 acres at Loni, the babul on which had been cut and sold, was sown in well-worked up patches 3′×3′ at 6 feet distances in lines 15 feet apart. Seed was also sown broadcast over the area. The ground is now reported to be completely stocked. The total area operated on in the Babul Reserves was thus 617 acres, and the expenditure amounted to Rs 845, or a little less than Rs. 1-6 per acre.

(7.)—*Cutting of creepers, &c.*

34. The Melghat is the only division in which creeper cutting is required to be undertaken at present. About 20 square miles in compartments Nos. 18 and 19 of the Bairagarh Reserve, and about 10 square miles in block No. 3 of the Gugumal Reserve, have been cleared at a cost of Rs. 226. The creepers cut over in former years have in many cases thrown out vigorous shoots, but nevertheless the beneficial effects of checking the growth of these plants by cutting portions from the stems cannot be doubted. Naturally sown seed of forest trees germinates much more freely on slopes where creepers have been cut than elsewhere.

Melghat Division

(8).—*Experiments and exotic trees.*

35. No further experimental sowings of the seed of exotic trees have been made.

In the Melghat the few specimens of eucalyptus and grevillea robusta raised in former years have proved fairly successful.

General remarks.

Only one carob tree now remains, and it appears to make little no or growth. In the Penganga Reserve of the South-Berar Division, on the other hand, there are five carob trees from four to six feet high, that were raised in 1882 in the compound of the forest thanna, and that are said to be in a flourishing condition

(9). *Communications and buildings.*

Melghat Division.

36. The last ten miles of the Sembadah-Biba road have been constructed at a cost of Rs. 2,873, and this feeder is now open for cart traffic for its entire length of 37 miles.

The Sembadah-Makhla road has been widened at a cost of Rs. 1,122. The work consisted chiefly of rock-blasting.

The Sembadah-Chikalda road, which will have a length of about 16 miles, has been commenced, and is expected to be completed by the end of March 1885.

The road has been laid out for its entire length, and a trial path 3 feet wide cut at a cost of Rs. 716. The steepest gradient is 1 in 20.

The first 1½ miles of the road on the Sembadah side have also been finished.

The expenditure on this portion amounted to Rs. 1,024, which is considerably more than the average cost of forest roads, but which is accounted for by the heavy cuttings that had to be made on both sides of the Sipna River. A cart track has been roughly opened out between Raipur and Patia, a distance of 15 miles, at a cost of Rs. 35. Further improvements will be made to this track hereafter. The present work was undertaken to bring the road into immediate use for the export of bamboos.

The country through which it passes is fairly level. Rs. 2,245 were spent in repairing roads constructed in former years.

The total expenditure during the year on road-making in the Melghat thus amounted to Rs. 8,015.

Difficulty was experienced in the matter of labour for a portion of the year in consequence of an outbreak of cholera, which carried off a number of men, and caused many others to abandon their work for a time.

Roads proposed for construction by the Public Works Department.

37. The Executive Engineer, East Berar Division, has informed me that the construction of the additional main roads proposed to be undertaken by the Public Works Department, and referred to in para. 26 of my Report for 1882-83, has been indefinitely postponed. This is much to be regretted, as comparatively little advantage is to be gained by the Forest Department opening out the interior of the Melghat to cart traffic, unless a sufficient number of outlets to the plains are also constructed.

At present there is only one such outlet, *viz.*, the Peli-Ellichpur road, and all the forest roads made up to date with the exception of the Chikalda-Bandum road have been feeders to it.

If the length of road between Chikalda and Ellichpur, now 30 miles, is not shortened considerably, it will be impossible to utilize the Chikalda-Bandum road, which has a length of about 25 miles, for the export of bamboos from the Gugumal Reserve; and the consequence will be that a large amount of this description of produce will rot every year in the Gugumal Reserve, whilst the Bairagarh Reserve is being drained to its utmost limit.

Were the length of road between Chikalda and Ellichpur shortened by about 10 miles, bamboos from the Gugumal Reserve could compete with those from the Bairagarh Reserve. I estimate that about five lakhs of bamboos would annually be taken along such a road, representing forest dues to the extent of Rs. 5,000.

It was originally intended to construct a new line of road altogether between Chikalda and Ellichpur, *via* Mota, Merki, and Dhamangaon, having a length of twenty-one and half miles and an estimated cost of Rs. 1,19,704, and this intention

has not, I believe, been abandoned, but the work merely postponed for a famine year. The delay that may thus be caused is much to be deprecated, and I would venture to hope that the alternative scheme lately submitted by the Executive Engineer for making a cord line six miles long to connect the present Ellichpur-Ghattang road with the Chikalda-Ghattang road may receive sanction. It would only necessitate the construction of six miles of new road at an estimated cost of Rs 18,000, and would reduce the distance for carts between Ellichpur and Chikalda to 22½ miles.

Buildings.

38. A new thana has been erected at Sembadah, costing Rs. 666.

The two forest bungalows at Chikalda, the rest-house at Makhla, 20 thanas in the Bairagarh Reserve, and 17 nakas in the bazaar range, have been repaired at an expenditure of Rs. 1,104.

Amraoti Division.

39. The road from Pohora to Amraoti has been repaired and made available for cart traffic. It is now much used in the export of fuel and grass from the reserves.

South Berar Division.

40. Roads and thanas in the reserves of this division have been kept in repair at an expenditure of Rs. 186.

CHAPTER IV.—Yield and working.

(1.)—*Departmental Operations.*

General remarks.

41. The Melghat Division is the only one in which any departmental timber operations are undertaken. The reserves of other divisions are enjoying complete rest with a view to their re-generation, the only produce exported from them being grass, dead and fallen wood, and bamboos.

The system of working the District Reserves and Unreserves was described in para. 64 of my Report for 1882-83.

Timber is only allowed to be cut on permission obtained from the Deputy Commissioner or from such of his revenue or forest subordinates as may be authorized by him to grant permission.

It must in all cases be paid for at certain fixed rates.

Fuel may be cut without permission, and is free when used within the limits of the village in which it is cut; when exported in quantities greater than head loads it is liable to duty.

Grass and minor produce are sold by auction. All dues are, as a rule, levied by Patels and Patwaris, who receive as remuneration a percentage on their collections.

Melghat Division.

42. The timber operations in the Melghat Division are confined to the cutting over of badly grown teak and other trees with a view to securing a healthy growth of coppice from the stools. The work is carried on departmentally, so as to ensure the trees being felled level with the ground, and the stools being neatly dressed. The trees, as they fall, are sold by auction, and cut up and removed by the purchasers. No depôts are maintained. Form No. 58 exhibits the details of the trees felled. The total number amounted to 1822, which is 139 more than last year. The expenditure was Rs. 249, and the sales realised Rs. 2,293.

Demand for timber from Bairagarh Reserve.

43. The demand for timber from the Bairagarh Reserve is still far from equalling the supply. People from the plains have not yet commenced to come in numbers to make purchases direct from the Forest Department, but remain in a great measure dependent for their supplies upon the hill tribes, and this

year many of the latter have been employed in the cutting up and removal of wind fallen trees. The reluctance that the people of the plains show to entering the Melghat can only, I suppose, be expected to wear away gradually, as the country becomes opened up and better known. Matters will, I have no doubt, right themselves naturally in course of time.

(2).—*Removal of produce by purchasers.*

Direction Division.

44. It is impossible to judge of the amount of produce removed from the District Reserves and Unreserves, as much of it is taken away free of charge or restriction of any kind. The subjoined statement, however, shows the revenue realised from the taxable produce exported from these forests, from which an estimate may be formed of the produce itself :—

Produce.		Ellichpur.	Amraoti.	Akola.	Buldana.	Basim.	Wun.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Timber ...	1882-83...	...	2	59	3,862	770	2,683	7,376
	1883-84...	...	...	38	2,530	232	1,990	4,790
Firewood & charcoal.	1882-83...	927	1,532	2,804	973	1,248	364	7,848
	1883-84...	365	5,042	3,474	718	962	188	10,749
Bamboos. .	1882-83...	...	...	21	...	11	867	899
	1883-84...	...	...	186	...	...	388	574
Grass ...	1882-83...	3,655	36,724	16,186	18,509	8,719	23,798	1,07,591
	1883-84...	785	29,987	16,954	17,972	12,290	30,400	1,08,388
Minor produce.	1882-83...	472	2,718	354	2,257	5,060	5,129	15,990
	1883-84...	252	3,063	521	1,976	5,332	4,710	15,854
Miscellaneous.	1882-83...	1,357	8	613	233	...	654	2,865
	1883-84...	6,247	12	2,001	748	...	669	9,677
Total ...	1882-83...	6,411	40,984	20,037	25,834	15,808	33,495	1,42,569
	1883-84...	7,649	38,104	23,174	23,944	18,816	38,345	1,50,032

Passes issued under District Forest Rules.

45. The passes issued by Patels and Patwaris under the District Forest Rules prescribing rates of duty for each description of produce were :—

District.		Passes issued under				Total.
		Rule II. Timber of reserved kinds.	Rule III. Timber of unreserved kinds.	Rule V. Fuel.	Rule VI. Miscellaneous.	
Amraoti ...	1882-83...	...	...	417	6	423
	1883-84...	...	...	452	50	502
Akola	1882-83...	...	72	680	14	766
	1883-84...	...	42	255	49	346
Buldana ...	1882-83...	83	1,057	688	62	1,890
	1883-84...	42	655	684	72	1,453
Basim	1882-83...	13	2,129	2,271	240	4,653
	1883-84...	4	2,100	1,718	130	3,952
Total ...	1882-83...	96	3,258	4,056	322	7,732
	1883-84...	46	2,797	3,109	301	6,253

The Deputy Commissioners of Ellichpur and Wun have omitted to furnish returns for their districts.

Melghat Division.

46. Form No. 63 exhibits in detail for divisions the quantity and value of produce removed.

In the following comparative statement the produce is shown separately for Reserves and Unreserves :—

Produce.		Bairagarh Reserve.	Gugumal Reserve.	Unreserved Forests.
Teak	1882-83...	C. ft. 21,320		155,563
	1883-84 ..	„ 21,947		177,812
Timber of other kinds ...	1882-83...	„ 2,806		142,640
	1883-84...	„ 4,307		161,547
Firewood	1882-83...	„ ...		378,491
	1883-84...	„ 28		295,110
Bamboos	1882-83...	Nos. 1,142,067	467,928	1,362,980
	1883-84...	„ 913,374	538,120	1,604,894
Grass	1882-83...	lbs. ...		6,197,625
	1883-84...	„ 1,680		4,743,480
Lac	1882-83...	„ 3,173		18,045
	1883-84...	„ 3,328		19,419
Teak leaves	1882-83...	„ ...		789,932
	1883-84...	„ ...		667,732
Fruits	1882-83...	„ 59,795		1,347,930
	1883-84...	„ 41,312		1,266,543
Gum	1882-83...	„ ...		5,765
	1883-84...	„ ...		3,826
Miscellaneous	1882-83...	„ 208		8,937
	1883-84...	„ 52		17,246

As regards reserves, the only points to be noticed are the increase of 627 and 1,501 respectively under cubic feet of teak and other timbers, and the decrease of 158,501 under bamboos. The former is accounted for by slightly better auction sales, and the latter by bamboos becoming scarce in places easily accessible from the cart roads in the Bairagarh Reserve. The export of bamboos from the Gugumal Reserve has increased a little, but is yet far below the possible yield. Thousands of bamboos rot every year in this forest for want of improved road communication between it and the plains.

In the unreserved forests there has been an increase of 22,249 and 18,907 respectively, under cubic feet of teak and other timbers, and of 241,914 under bamboos. The former may be attributed to the withdrawal of the prohibitive duty on teak bullees, and to the demarcation of jagir villages, whereby definite limits have been given to such estates. The latter may be accounted for by the increased production of bamboos consequent on the stoppage of the indiscriminate felling of them for fodder. The decrease under firewood and grass is owing to head loads of these articles being allowed to be exported free of duty. The number of head loads taken away is annually increasing, while taxable loads are decreasing in like proportion.

Amraoti Division

47. The yield for the last two years is shown below:—

Timber ...	1882-83 ...	C. ft.	3,452
	1883-84 ...	„	1,139
Firewood ...	1882-83 ...	„	168,518
	1883-84 ...	„	141,228
Grass ...	1882-83 ...	lbs.	4,800,055
	1883-84 ...	„	5,982,322
Miscellaneous ...	1882-83 ...	„	186,559
	1883-84 ...	„	162,913

The large increase under grass is due to successful fire conservancy in the ramnas and chiroree blocks. The Amraoti market has been kept fully supplied with grass for the whole season, with the result that at the close of the hot weather prices did not rise above Rs. 4 per thousand poolas. Hitherto, at this period of the year the prevailing rates have been from ten to twelve rupees.

48. The subjoined statement exhibits a considerable increase in the exports of all descriptions of produce from the reserves of this division :—

South Berar Division.

Timber	1882-83	C. ft.	6,472
	1883-84	,,	8,246
Firewood	1882-83 ...	,,	16,705
	1883-84 ...	,,	19,387
Grass	1882-83 ..	lbs.	6,217,785
	1883-84	,,	10,030,143

49. It has, however, now become apparent that the reserves both of the South Berar and Wun Divisions will during the period of their regeneration never prove remunerative or even self-supporting, so long as the revenue from them is solely dependent on the sale of grass and dead and fallen wood as at present. As a rule forest reserves should, I think, be expected to be self-supporting. It should generally be possible to realise enough revenue from them to cover expenditure without in any way intrenching on capital, or preventing their gradual improvement and restoration.

Financial condition of South Berar and Wun Reserves.

Except for thatching purposes the consumption of grass by the ryots of Berar is very small indeed. Their cattle are in few cases stall fed, but are grazed during the rainy season on the waste lands adjoining villages, and in the cold and hot weather months on the stubble left in fields after the crops have been reaped, supplemented by "karbi" or the leaves and stalks of "jowari." Whilst, therefore, there is a great demand for grazing, there is little or none for grass. I have accordingly recommended light grazing being permitted in half the area of each forest for a portion of the year, the other half being retained for the supply of grass. I do not myself think that light grazing does much injury to forests of teak and anjan, and these are the trees of most importance in the reserves under reference. By light grazing is meant admitting a certain number of cattle (excluding sheep, goats, and camels, which are more destructive to forests than cattle are) not exceeding one head for every 2½ acres from the commencement of the rains till the end of October, and taking steps to prevent any particular locality being over-grazed. Such grazing properly regulated ought only to have the effect of keeping the growth of grass sufficiently short to admit air and light to the young plants without actually denuding the soil, and so exposing it to the direct action of the sun and rain.

There would probably be a great demand for grazing of the above nature, and therefore a prior claim to it would be given to cattle belonging to the inhabitants of villages adjoining reserves, upon whom the Forest Department is in a great measure dependent for labour. The popularity of the department with such villages would in this way be increased, and fire conservancy possibly rendered a matter of less difficulty. A certain amount of relief would at the same time be afforded to the already overworked district grazing grounds, whilst there would still remain in the ungrazed portions of the reserves sufficient grass to meet all possible requirements.

Wun Division

50. The yield of the reserves in the Wun Division, compared with that of the preceding year, is thus exhibited :—

Timber	1882-83	C. ft.	290
	1883-84	,,	112
Firewood	1882-83	,,	17
	1883-84	,,	364
Bamboos	1882-83	Nos.	37,100
	1883-84 ..	,,	82,550
Grass	1882-83 ..	lbs.	8,211,000
	1883-84	,,	7,823,340

(3).— *Free grants of forest produce.*

General remarks.

51. In the Melghat and South Berar Divisions only are any free grants of forest produce made.

In the former the inhabitants of the permanent black soil villages are allowed to help themselves to all descriptions of produce (except teak) for home consumption, but not for sale or export.

In the South Berar Reserves permission is given to villages, parts of whose lands are included within forest limits, to cut grass for home consumption for a fortnight in each year conditionally on no fires having occurred in the forests during the preceding year.

(4).—*Summary of produce removed from the forests.*

Summary of produce removed from forests.

52. The following is a summary of the produce shown in paras. 46, 47, 48 and 50:—

Produce.		1882-83.		1883-84.
Teak	C. ft.	176,883	...	199,759
Timber of other kinds	,,	155,660		175,351
Firewood	,,	563,731	...	456,117
Bamboos	Nos.	3,010,075		3,138,938
Grass	lbs.	25,426,465		28,580,965
Lac	,,	21,218		22,747
Teak leaves	,,	789,932		667,732
Fruits	,,	1,407,725		1,307,855
Gum	,,	5,765		3,826
Miscellaneous	,,	195,704		180,211

(5).—*Imports and exports of forest produce.*

Imports and exports of forest produce

53. There is nothing to record under this head.

CHAPTER V.—Financial Results.

General remarks

54. The financial results are exhibited in Forms Nos. 53 to 57.

The figures are based on the Comptroller's "Annual Summary," and may possibly differ slightly from those entered in his "Final Summary," a copy of which is not forwarded to my office till September or October.

The figures may be thus detailed for divisions:—

		Revenue.	Expenditure.	Surplus.	Deficit.
		Rs.	Rs.	Rs.	Rs.
Direction.	Direction Office	37	24,537		24,500
	District Reserves	13,128	2,968	10,160	...
	Do. Unreserves	1,36,904	15,105	1,21,799	.
Amraoti Division.	Divisional Office		2,404		2,404
	Amraoti Hills Reserve	12,616	3,237	9,379	...
Melghat Division.	Divisional Office ...	24	16,555		16,531
	State Reserves	21,633	24,776	.	3,143
	Unreserves	1,12,942	28,752	84,190	...
South Berar Division.	Divisional Office	157	12,785		12,628
	State Reserves .	5,769	6,964		1,195
Wun Division.	Divisional Office	14	9,889	...	9,875
	State Reserves .	4,993	8,567	..	3,574
	Total ...	3,08,217	1,56,539	2,25,528	73,850
		Deduct deficit .		73,850	
		Net surplus		1,51,678	

The revenue was realised in about equal proportions by Forest and Civil Officers :—

			Rs
Forest Officers	...	...	1,58,185
Civil do	...	...	1,50,032
Total		...	3,08,217

If the receipts and charges of the Direction and Divisional offices be equally divided amongst them, the revenue and expenditure of the different classes of forest appear as below :—

Class of Forest.	Revenue		Expenditure		Surplus.		Deficit.	
	1882-83.	1883-84	1882-83.	1883-84	1882-83.	1883-84.	1882-83	1883-84.
	Rs.	Rs	Rs	Rs.	Rs	Rs.	Rs	Rs.
State Reserves ...	41,899	45,088	62,618	65,600			20,719	20,512
District do. ..	8,423	13,205	25,748	25,024		..	17,325	11,819
Unreserved Forests	2,36,721	2,49,924	61,609	65,915	1,75,112	1,84,009	...	...
Total ...	2,87,043	3,08,217	1,49,975	1,56,539	1,75,112	1,84,009	38,044	32,331
			Deduct deficit		38,044	32,331		
			Net surplus .		1,37,068	1,51,678		

Compared with last year there has been an increase in revenue of Rs. 21,174, and in expenditure of Rs. 6,564. The revenue is the highest that has been realized since the formation of the department.

The following are the heads under which most of the increase has taken place :—

Budget. head		Increase Rs		Cause of increase.
II-*a*.	...	11,939	..	A large export of teak and other woods from the Melghat Unreserved Forests.
II-*d*.	...	4,965	..	Better auction sales of grass in District Forests.
III.	...	5,670	...	A severe storm in the Ellichpur District, which uprooted numerous trees.
Total	.	22,574		

The heads showing increase in expenditure are :—

Budget head		Increase Rs.		Cause of increase.
A.-VII-*b*.	...	1,023	.	Erection of a substantial thana at Sembadah.
B.-I-*a*.	...	2,986	.	Promotion of Conservator.
B.-I-*c*.	...	912	..	Additional subordinate Establishments.
B.-III-*f*.	...	10,962	..	Merely nominal percentages to village officials have been debited to this head instead of to A-II. as was done last year. The increase is partly balanced by a decrease of Rs. 9,559 under A-II.
Total	...	15,883		
		9,559		Deduct decrease under A. II.
		6,324		Net increase.

The receipts and charges of the year are exhibited under main budget heads in the subjoined statement :—

Heads.	Receipts.		Charges.	
		Rs.		Rs.
I. Departmental timber operations ..	I.	...	I.	...
II. Other revenue ..	II., III., V.,	3,08,217	II., III., V., IX., 75 o/o VI. and B.	1,03,424
III. Formation, protection, and improvement of forests... ...	...	...	VII., VIII., 25 o/o VI. and B.	53,115
	Total ...	3,08,217		1,56,539

Direction Division.

55. The revenue and expenditure of the District Reserves and Unreserves are as follow :—

District Reserves.

Budget Heads.	Ellichpur District.		Akola District		Buldana District.		Basim District.		Total.	
	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts.										
II. Timber, &c., removed by purchasers	2,441	1,148	4,087	3,459	637	631	1,126	1,308	8,291	6,546
III. Confiscated and waif wood..	...	6,247	...	5	5	330	..	...	5	6,582
V. Miscellaneous	...	...	...	...	..	...	...	...	...	...
Total ...	2,441	7,395	4,087	3,464	642	961	1,126	1,308	8,296	13,128
Expenditure.										
Works A.	395	132	307	253	166	4	42	101	910	490
Establishment B.	423	438	1,115	1,197	...	...	936	843	2,474	2,478
Total ...	818	570	1,422	1,450	166	4	978	944	3,384	2,968
Surplus ...	1,623	6,825	2,665	2,014	476	957	148	364	4,912	10,160

District Unreserves.

Budget Heads.	Ellichpur District.		Amraoti District.		Akola District.		Buldana District.		Wun District.		Basim District.		Total.	
	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.
Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
II. Timber, &c., removed by purchasers	2,613	254	40,976	38,092	15,337	17,714	24,964	22,565	32,841	37,676	14,682	17,508	1,31,413	1,33,809
III. Confiscated and waif wood ...	1,357	..	7	10	2	...	228	416	157	363	..	...	1,751	789
V. Miscellaneous	...	...	1	2	611	1,996	..	2	497	306	...	...	1,109	2,306
Total ...	3,970	254	40,984	38,104	15,950	19,710	25,192	22,983	33,495	38,345	14,682	17,508	1,34,273	1,36,904
Expenditure.														
Works A.	60	62	1,757	582	183	..	2,695	35	2,980	60	495	6	8,170	745
Establishment B.	...	...	923	1,854	...	3,819	816	3,396	1,262	4,969	...	322	3,001	14,360
Total ...	60	62	2,680	2,436	183	3,819	3,511	3,431	4,242	5,029	495	328	11,171	15,105
Surplus ...	3,910	192	38,304	35,668	15,767	15,891	21,681	19,552	29,253	33,316	14,187	17,180	1,23,102	1,21,799

The increase in the revenue of the District Reserves is due to the sale of windfallen trees in the Ellichpur District.

The differences in expenditure under heads A and B in District Unreserves are accounted for by payments to Patels and Patwaris having been charged to head A in 1882-83 and to head B in 1883-84.

Melghat Division.

56. Below is a statement of the revenue and expenditure of the Melghat Reserves and Unreserves.

Budget heads.	Bairagarh.		Gugumal and Chikalda.		Unreserves.		Total.	
	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts.								
I.—Timber, &c., removed by Government agency	5,117		...	...	...	...	5,117	..
II.—Timber, &c., removed by purchasers	12,986	16,143	4,679	5,382	1,02,186	1,12,004	1,19,851	1,33,529
III.—Confiscated and waif wood	33	17	102	1	128	204	263	222
V.—Miscellaneous	103	89	3	1	7	734	113	824
Total	18,239	16,249	4,784	5,384	1,02,321	1,12,942	1,25,344	1,34,575
Expenditure.								
Works A.	13,647	14,817	3,067	3,023	20,999	20,658	37,713	38,498
Establishment B.	4,492	4,464	2,586	2,472	7,074	8,094	14,152	15,030
Total	18,139	19,281	5,653	5,495	28,073	28,752	51,865	53,528

The increase in revenue occurred chiefly in the unreserves, and is owing to larger exports of timber.

Amraoti Division.

57. The revenue and expenditure of the Amraoti Hills Reserve compare thus:—

Budget heads.	1882-83. Rs.	1883-84. Rs.
Receipts—		
II.—Timber, &c., removed by purchasers	12,934	12,513
III.—Confiscated and waif wood	8	103
V.—Miscellaneous	2	...
Total	12,944	12,616
Expenditure—		
Works A.	512	1,308
Establishment B.	1,799	1,929
Total	2,311	3,237

The Divisional office was only formed on the 28th August 1883, and hence the increased expenditure under B.

South Berar Division.

58. The financial results are exhibited below :—

Budget Heads.	Gerumatergaon Reserve.		Ghatbori Reserve (including Mandawa Reserve.)		Pongaga Reserve.		Loni and Bhongaon Reserves.		Rui Reserve.		Amlari Reserve.		Total.	
	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83	1883-84	1882-83.	1883-84.	1882-83	1883-84.	1882-83.	1882-84.
Receipts	Rs	Rs	Rs	Rs	Rs	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
II.—Timber, &c., removed by purchasers	406	644	856	1,448	501	629	1,219	2,288	369	431		329	3,851	5,769
III.—Confiscated and waif wood	..	..	..	..							..			
V.—Miscellaneous	25		8				114						147	
Total	431	644	864	1,448	501	629	1,333	2,288	369	431		329	3,498	5,769
Expenditure..														
Works A. ..	537	479	420	374	242	176	884	450	293	150		685	2,376	2,314
Establishment B. ...	1,423	1,258	1,544	1,484	671	659	452	463	361	355		431	4,451	4,650
Total	1,960	1,737	1,964	1,858	913	835	1,336	913	654	505		1,116	6,827	6,964

The increase in receipts is satisfactory, as there are at present so few sources from which revenue can be derived.

Wun Division.

59. The revenue and expenditure of the Wun Reserves are thus detailed :—

Budget Heads.	Kinwat Reserve.		Kelapur Reserve.		Yeotmal and Darwha Range		Wun Range.		Total.	
	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts.										
II. Timber &c., removed by purchasers ...	101	161	945	1,816	687	1,394	560	1,281	2,293	4,652
III. Confiscated and waif wood..	..		..	...	3		...	4	3	4
V. Miscellaneous	...	45	6	...	...	273	5	19	11	337
Total ...	101	206	951	1,816	690	1,667	565	1,304	2,307	4,993
Expenditure.										
Works A.	754	1,431	887	577	783	1,620	192	231	2,616	3,857
Establishment B.	1,449	1,426	1,153	1,116	1,426	1,450	680	716	4,708	4,710
Total ..	2,203	2,857	2,040	1,693	2,209	3,070	872	947	7,324	8,567

CHAPTER VI.—General Remarks.

Form of Report.

60. The present Report has been drawn up in the new form prescribed by the Government of India, and given in the addenda and corrigenda substituted for para. 254 of the Forest Code.

Reduction of revenue survey maps.

61. The Superintendent of Forest Surveys has undertaken to prepare taluk maps, on the scale of 1 inch=1 mile, showing in different colours each description of forest land under the new classification, *viz.* State Forests, Woods, Ramnas and Grazing lands, and has already commenced the work.

The maps are being compiled from the revenue survey village maps, and will show in addition to field detail of forest land, the boundaries of each village, the village sites, the chief roads and rivers, and the occupied area in blocks. Each map will be on one sheet of convenient size.

Topographical maps of reserves.

62. Sanction has been accorded to the proposals made in my letter No. 805, dated 6th March 1883, for the topographical survey of the reserves in Berar not included in the Melghat, the Superintendent of Forest Surveys having reported that the work can be

done at little more expense than will be incurred in the survey of the boundary lines now in progress.

63. The registers of rain-fall, &c., in the different reserves are shown in Appendix D. The following figures, which have been abstracted from the appendix, show that in all reserves where rain-gauges have been kept, there has been during the year under report a large increase both in the fall of rain and in the number of rainy days.

Rainfall and flood registers.

The increase in rain ranges from 10 inches in the Kinwat Reserve to 41 inches in the Ghatbori Reserve. It has materially assisted natural re-production in all reserves.

Station.	Year.	Rainfall. Inches.	Cents.	No. of rainy days.
Chikalda	1882-83	69	71	89
	1883-84	88	15	113
Bairagarh Reserve—				
Makhla	1882-83	70	29	93
	1883-84	86	91	113
Raipur	1882-83	52	95	69
	1883-84	68	49	92
Pili	1882-83	55	38	79
	1883-84	77	41	113
Patia	1882-83	47	87	83
	1883-84	60	56	77
Hatru	1882-83	56	71	80
	1883-84	73	62	88
Gerumatergam Reserve—Warwand	1882-83	25	10	51
	1883-84	61	...	75
Ghatbori Reserve—Iswee...	1882-83	26	85	52
	1883-84	67	70	78
Penganga Reserve...Marwadi Khurd.	1882-83	33	25	72
	1883-84	46	79	75
Kinwat Reserve...Sondabi	1882-83	45	24	59
	1883-84	55	6	63

The Superintending Engineer is still unable, owing to the number of his Assistants on leave, to undertake the gauging of floods in the Melghat, with a view to ascertaining how much more fire protected forests absorb the rainfall than unprotected forests.

Fines inflicted.

64. Fines aggregating Rs. 154 have been inflicted on 38 subordinates.

Notice of officers.

65. The report speaks for itself of the good work done by Divisional Officers. The subordinate establishments, both Forest and Office, have, with few exceptions, given complete satisfaction.

I have the honour to be,

Sir,

Your most obedient Servant,

A. T. DRYSDALE,

Conservator of Forests,

Hyderabad Assigned Districts.

APPENDICES.

APPENDIX A.

THE Resident having in his Secretary's letter to the Commissioner, Hyderabad Assigned Districts, No. 1665, dated 4th July 1883, sanctioned the introduction into Berar of the scheme for connecting Forest Officers more closely with the Civil Administration sketched in paras. 4 to 10 of the Review by the Inspector General of Forests of Forest Administration in the several Provinces under the Government of India for the year 1880-81, the following procedure will be observed from the 1st April 1884 in the conduct of Forest business.

System of Administration.

I.—Forest Officers will hold charge of all forests, whether reserved or otherwise, in direct subordination to Deputy Commissioners. They will receive no orders from any other authority, and will be in the position of Assistants to Deputy Commissioners in Forest matters, while Deputy Commissioners will give no orders on such matters except through Forest Officers. On matters of ordinary routine, such as the cutting of boundary lines, the repairs of boundary pillars, the burning of fire paths, &c., Deputy Commissioners will authorise Forest Officers to issue orders without reference to them, making such arrangements as may be necessary for the orders being reported by means of weekly diaries. Other matters will be referred to Deputy Commissioners by means of office notes.

The Forest Officer being the head of a branch of the Deputy Commissioner's office will not communicate with the Deputy Commissioner by official letters.

Weekly Diaries.

II.—The Forest Officer will draw up in his own hand a sufficiently full report or diary of all business, and send it to the Deputy Commissioner at the close of each week. The Deputy Commissioner, after recording any remarks or instructions he may think fit, will forward it for the Conservator's information, and that officer will return it without delay, noting any remarks or suggestions he may have to offer. It will then go back to the Forest Officer through the Deputy Commissioner, who, if he disagrees with the Conservator's remarks or suggestions, will inform the Forest Officer, so as to guard against action being taken of which he disapproves. In such cases he will at once inform the Conservator.

Charges.

III.—The charge of each Forest Officer will be defined by notification published in *Residency Orders.*

Budget-Estimate.

IV.—Matters of finance will ordinarily be arranged for in the Budget-Estimate, but the control will rest with the Conservator. He will have power to make transfers from one district to another under A., working charges, and B., establishments, and to sanction estimates for works as provided in the Forest Code, but no transfers will be made without the consent of the Deputy Commissioners concerned.

If during the year a Deputy Commissioner desires to incur expenditure which is not provided in the budget, he should address the Conservator, who, if he approves, and can find the money, will make it available.

The Budget-Estimate will be framed by the Forest Officer and submitted by the 1st August to the Deputy Commissioner, who after approval will forward it to the Conservator for incorporation in the Provincial Budget.

Plan of operations.

V.—The Forest Officer will submit together with his Budget-Estimate a "plan of operations," in which the work to be done in each forest or description of forest for the year should be detailed, such as demarcation of boundaries, road-making, and other communications, fire protection, closing forests against grazing, cultural operations, thinning and cutting, buildings, &c.

This plan of operations must first be approved by the Deputy Commissioner before submission to the Conservator.

After final approval by the Conservator no deviation from it will be permissible without the consent of that officer.

The responsibility for carrying out the plan of operations will rest entirely with the Deputy Commissioner.

The Conservator will be constantly informed of the progress of all descriptions of work by means of the Forest Officer's weekly diaries, and with reference thereto will communicate whenever desirable with the Deputy Commissioner in all matters of professional detail or if necessary will address the Commissioner.

VI.—The appointment, posting, and promotion of Forest Rangers and Foresters and of all subordinates drawing a salary of Rs. 15 per month or more, will rest with the Conservator, whilst the appointment, posting, and promotion of Forest guards and of subordinates drawing less than Rs. 15 per mensem will rest with the Deputy Commissioner. The Deputy Commissioner will have power to fine to the extent of one month's salary, or to suspend any Forest subordinate, also to dismiss Forest guards. The dismissal of Rangers and Foresters will rest with the Conservator, but he will be guided in his action in such matters by the Deputy Commissioner.

Establishments.

VII.—All forest accounts will be prepared by the Forest Officer, and will include the revenue and expenditure of every description of forest. Credits of revenue realised by Forest Officers will, as heretofore, be supported by "chalans," and credits of revenue realised by Civil Officers by treasury schedules.

Accounts.

Tahsildars will submit all forest accounts to the Forest Officer, who will incorporate them in his accounts.

VIII.—At the close of the financial year a report will be prepared by the Forest Officer showing the progress made during the year in the forests under his charge.

Annual Reports.

It will be forwarded to the Conservator through the Deputy Commissioner.

The form of report and arrangement of subjects will be as prescribed in the Forest Code.

FORESTS.

APPENDIX B.—*Statement of District Forests showing areas classified during the year* 1883-84.

District.	Taluk.	Area of District Forests.		Percentage of column 3 on total area of Khalsa villages.	Proposed classification of District Forests.									Head of cattle excluding sheep and goats.			Area of grazing per head of cattle.	
					State forests.	Woods.		Grass lands.		Grazing lands.		Open forests available for the extension of cultivation.		Plough cattle.	Other cattle.	Total.	Ordinary on column 8.	Extra ordinary on columns 5, 6, and 7.
1	2	3		4	5	6		7		8		9		10	11	12	13	14
		A.	g.			A.	g.	A.	g.	A.	g.	A.	g.					
Basim	Basim ...	95,652	16	15·04	...	698	2	...	...	93,343	17	1,610	37	45,674	84,444	130,118	·71	·005
	Total ...	95,652	16	...	...	698	2	...	...	93,343	17	1,610	37	45,674	84,444	130,118	...	...
Akola	Akot	8,083	23	2·47	...	...	...	...	...	7,990	28	92	35	22,770	39,276	62,046	·12	...
	Jalgaon ...	25,394	9	10·0	...	65	28	...	...	25,328	21	...	...	15,583	33,248	48,831	·51	·001
	Balapur ...	48,428	25	13·90	...	45	5	98	15	48,285	5	...	...	20,201	38,420	58,621	·82	·002
	Akola	58,197	21	12·55	...	...	...	1,828	23	56,368	38	...	...	30,221	53,540	83,761	·67	·021
	Khamgaon ...	16,068	4	5·85	...	539	19	...	...	15,425	10	103	15	14,440	31,388	45,828	·33	·011
	Total ...	156,172	2	...	...	650	12	1,926	38	153,398	22	196	10	103,215	195,872	299,087	...	...
Buldana	Malkapur ...	33,781	35	6·85	...	394	34	57	1	32,946	18	383	22	33,089	54,941	88,030	·37	·005
	Chikhli ...	99,582	4	15·95	...	258	24	...	...	97,339	2	1,984	18	40,408	67,483	107,891	·90	·002
	Mehkar ...	114,740	37	18·71	...	343	32	805	10	110,796	8	2,795	27	35,590	69,941	105,581	1·04	·01
	Total ...	248,104	36	...	...	997	10	862	11	241,081	28	5,163	27	109,087	192,365	301,452	...	...
	Total area classified ...	499,929	14	...	...	2,345	24	2,789	9	487,823	27	6,970	34	257,976	472,681	730,657	...	...

APPENDIX C.

BOOK CIRCULAR No. 1. OF 1884.

From S. O. B. Ridsdale, Esquire, C. S., Officiating Commissioner, Hyderabad Assigned Districts, to all Deputy Commissioners and Forest-Officers, Hyderabad Assigned Districts, dated Amraoti, the 17th May 1884.

SIR,—I HAVE the honour to communicate for your guidance the accompanying Rules for the management of District Forests, which have received the approval of the Resident.

I have, &c.,

S. O. B. RIDSDALE,

Commissioner,

Hyderabad Assigned Districts.

Rules for the management of District Forests under the new classification.

In the re-classification of the District Forests in Berar the land having been divided into—

1—woods;
2—rumnas;
3—grazing lands;
4—open forests;

the following instructions are issued for the management of these forests :—

Woods.

I. The woods, which consist for the most part of babul buns, should be worked on a 20 years' rotation, taluk by taluk, a twentieth part of the area under babul in each taluk being felled annually.

The buns first selected for felling should be those situated near large towns, where there is likely to be a good demand for the wood.

II. The timber should, if possible, be sold by auction as it stands conditionally on the trees being felled level with the ground or, if such can be done without loss, a foot below ground, and the wood being removed within a fixed period after sale; the period on no account to extend beyond the time when babul seed ripens. The date of sale should, as far as possible, be made to suit intending purchasers. If auction sale as above be not practicable, the Deputy Commissioner should make such other arrangements as seem best for the felling and disposal of the trees.

III. When the wood has been removed, plots three feet square and at least one foot deep, should be well worked up at six feet distances in lines 15 feet apart, and seed thickly sown in them about half an inch below the surface, as soon after the seed ripens as possible. Seed that has passed through goats should be used wherever procurable. Seed should also be thickly sown broadcast between the lines.

If the ground is sufficiently open for a plough to be used, instead of making plots, strips three feet broad and 15 feet apart might be ploughed up and seed sown in them by means of a "teephun," in the same way that grain is sown. Three deep turns of the plough should make the strips of sufficient breadth. Seed should also be thickly sown broadcast between the strips.

The Forest Officer must, however, to a great extent use his own discretion in determining what measures should be adopted in each instance for re-stocking the ground. In some cases it may be possible to do without sowings of any kind, as for instance when the ground is already thickly strewn with naturally sown seeds; but such cases are not likely to be numerous.

IV. Grazing should on no account be permitted in babul buns, but the grass in buns not being worked might be annually sold by auction for cutting.

Rumnas.

V. The grass in rumnas, except when otherwise specially ordered, should ordinarily be annually sold by auction for cutting; or in cases where sale by auction may be found unsuitable, cutting may be permitted at fixed rates, or on such other terms as the Deputy Commissioner may direct.

VI. No grazing or felling of wood should be permitted within rumnas.

Grazing lands

VII. Grazing lands are divided into two classes, *viz.*:—

A.—Grazing lands in which certain timber trees, as well as trees valuable for fruit and shade, of the kinds specified in the margin, have been reserved.

TIMBER TREES.

1. Teak—*Tectona grandis.*
2. Tewas—*Oojeinensis dalbergioides.*
3. Shoshum—*Dalbergia latifolia.*
4. Bijasal—*Pterocarpus Marsupium.*
5. Anjan—*Hardwickia binata*
6. Babul—*Acacia arabica*, also Bamboo—*Dendrocalamus strictus.*

FRUIT AND SHADE TREES.

1. Peepul—*Ficus religiosa.*
2. Tamarind—*Tamarindus indica.*
3. Mango—*Mangifera indica.*
4. Chironji—*Buchanania latifolia*
5. Neem—*Melia indica.*
6. Banyan—*Ficus bengalensis*
7. Sendhi—*Phœnix sylvestris*
8. Kowah—*Terminalia arjuna.*
9. Mowha—*Bassia latifolia*, also Bamboo—*Dendrocalamus strictus.*

B.—Grazing lands in which the reservation extends only to trees valuable for fruit and shade, of the kinds specified in the margin.

1. Peepul—*Ficus religiosa.*
2. Tamarind—*Tamarindus indica.*
3. Mango—*Mangifera indica.*
4. Chironji—*Buchanania latifolia.*
5. Neem—*Melia indica.*
6. Banyan—*Ficus bengalensis.*
7. Sendhi—*Phœnix sylvestris.*
8. Kowah—*Terminalia arjuna.*
9. Mowha—*Bassia latifolia*, also Bamboo—*Dendrocalamus strictus.*

With the exception of the reserved kinds as specified above, no restriction should be placed on the cutting by villagers for their own use of any tree growing on either description of grazing land.

VIII. When wood, however, is required by charcoal or lime-burners, contractors, and other large consumers, application should be made to the Deputy Commissioner, or to such other officer as the Deputy Commissioner may direct, who will make special arrangements for the supply on such conditions and at such rates as may be from time to time determined.

IX. In large towns where the consumption of wood is great, nakas may be established, and the usual dues levied on the imports, or the right to levy such dues may be sold by auction, whichever plan is considered preferable. The sanction of the Resident should, however, be obtained before either of these courses is adopted.

X. For the cutting of reserved trees special arrangements will be made by the Deputy Commissioner. Operations should be restricted to a certain area annually varying with the demand, but in no case to exceed one-twentieth part of the grazing lands. The trees to be felled should be selected by a Forest Officer, and if possible be sold by auction, as they stand, the dates of sale being made convenient for intending purchasers, and one of the conditions of sale being that the trees are felled level with the ground with a view to securing straight and healthy coppice. If this mode of disposal by auction sale be not practicable, the Deputy Commissioner may make such other arrangements for disposing of the trees as may seem advisable.

Grazing dues.

XI. In taluks where the levy of a general grazing tax has been sanctioned by the Resident, dues will be leviable on all cattle at such rates as the Resident may from time to time approve, subject to such exemptions on account of plough cattle or otherwise, as may be provided in these rules, or permitted in special cases by the Commissioner, Hyderabad Assigned Districts.

XII. In taluks where large blocks of land have been set aside for grazing and no general grazing tax has been sanctioned, dues as above determined will be levied only on cattle grazing within the lands so set aside, subject to similar exemptions as aforesaid.

XIII. For the levying of grazing dues the following arrangements should be made:—

In taluks where a general grazing tax is leviable Patels and Patwaris should be required at the commencement of the rainy season to prepare statements of the cattle in their villages on which dues are leviable, and forward them to the Tahsildar. According to these statements the Taluk Forester under the orders of the Tahsildar will fill in grazing passes, and make them over to the Patels and Patwaris for distribution. The Patels and

Patwaris will be held responsible for the collection of the dues on these passes, and for the payment of the same into the tahsil treasury. After the passes have been issued the Taluk Forester, as well as any other Forest subordinate, who may be available for the work, should be required to check the passes with the actual cattle grazed, and submit statements to the Tahsildar of all cattle found without passes. The Tahsildar will then take the necessary action for the recovery of the dues.

In taluks where blocks of grazing land have been set aside, only the Patels and Patwaris of the villages included in the blocks should be required to submit statements of cattle They should enter in the statements not only their own village cattle, but also those brought from outside villages. When this cannot conveniently be done, the Divisional Forest Officer should himself issue passes on outside cattle, or other suitable arrangements should be made by the Deputy Commissioner. The statements to be filled in by Patels and Patwaris, the grazing pass books, and the statements of cattle found grazing without passes, should be obtained from the office of Conservator of Forests.

XIV. In taluks where a general grazing tax prevails, in order to provide for the exemption of plough bullocks, a deduction should be made from the total number of cattle in each village chargeable with grazing dues, at the rate of one bullock for every 10 acres of land under cultivation.

XV. In taluks where blocks of grazing have been set side a similar deduction should be made from the total number of cattle chargeable with grazing dues belonging to the villages comprised within the grazing blocks. Dues should, however, be levied on cattle of all kinds sent to the grazing blocks from other villages.

XVI. Patels and Patwaris should each be granted five per cent. on the collections of grazing dues made by them. The same percentage should also be allowed them on other forest revenue, which may be collected through their agency.

Open forests.

XVII. Open forests, which comprise the areas available for the extension of cultivation, and which will therefore be subject to constant variation, should be treated, so far as forest management is concerned, in the same manner as B.—Grazing lands.

Work of Taluk Foresters.

XVIII. All descriptions of forest will be in charge of the Divisional Forest Officer in subordination to the Deputy Commissioner, and the registers required by the Forest Code to be kept up for the District Forests, *viz.*:—

Record of Forests,
Register of Yield,
Record of Re-production and Improvements,
Forest Journal,

will be maintained by the Forest Officer.

XIX. The Taluk Foresters should be given as little office work as possible, so that they may be free to move about their taluks at all times of the year, checking the grazing passes and superintending the fellings and other works in woods and grazing lands. The only monthly accounts they should be required to submit are :—

Form IV.—Account of trees felled.

Form XIII.—Revenue from timber and other produce removed by consumers or purchasers.

Form VI.—Cash book (when any revenue is collected or payment made by them.)

Form XXII.—Salary list.

Their movements and work done should be reported in a weekly diary, Form IX.

FORESTS.

APPENDIX D.—*Meteorological Observations made in Reserved Forests.*

| Month. | Mean of Hygrometer. | | | | | | | | Mean of Thermometer. | | | | | | Rain fall. | | | | | | | |

FORESTS.

ANNUAL FORM No. 49.

Division or Range.	Civil district or territory.	Name of forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in square miles.	No. and date of Notification of addition or transfer.	Remarks.
		Demarcated State Forests.								
Melghat Division	Ellichpur District	Bairagarh Reserve ...	272,049	425	...	...	272,049	425	...	Published in *Hyderabad Residency Orders*, dated 20th March 1876.
		Gugumal do. ...	115,200	180	...	...	115,200	180	...	Do. do. do., 15th December 1882.
		Chikalda do. ...	2,400	4	...	...	2,400	4	...	Do. do. do., 15th November 1883.
Amraoti Division ...	Amraoti do. ...	Amraoti Hills Reserve ...	49,847	78	1,126	...	50,973	80	2nd Asst. Resident's No. 1720, dated 20th July 1883.	Chirori Reserve published in *Hyderabad Residency Orders*, dated 1st August 1883.
South Berar Division.	Buldana do. ...	Gerumatergaon Reserve ...	45,992	72	...	...	45,992	72	...	Published in *Hyderabad Residency Orders*, dated 15th March 1883.
		Amdari Reserve ...	13,717	21	...	...	13,717	21	...	Do. do. do., 15th February 1883.
	Buldana, Akola, Basim Districts.	Ghatbori do. ...	23,760	37	...	...	23,760	37	...	Do. do. do., 15th March 1883.
	Akola District ...	Mandwa do. ...	5,475	9	...	...	5,475	9	...	Do. do. do., 1st December 1882.
		Loni do. ...	908	1	...	...	908	1	...	Do. do. do., 15th March 1883.
		Bhongaon do. ...	1,368	2	...	...	1,368	2	...	Do. do. do., do.
	Basim do. ...	Pengânga do. ...	11,575	18	...	...	11,575	18	...	Do. do. do., do.
		Rui do. ...	6,647	10	...	...	6,647	10	...	Do. do. do., 2nd January 1883.
	Do. do.	Kinwat do. ...	52,558	82	...	...	52,558	82	...	Do. do. do., 15th March 1883.
		Kelapur do. ...	40,747	64	...	...	40,747	64	...	
		Gondwakri do. ...	16,359	26	...	...	16,359	26	...	
		Khorad do. ...	16,117	25	...	...	16,117	25	...	
		Pathrot do. ...	2,889	5	...	...	2,889	5	...	
		Anjankheir do. ...	7,634	12	...	...	7,634	12	...	
		Lonbehel do. ...	8,966	14	...	...	8,966	14	...	
Wun Division ...	Wun District ...	Teak tracts at Mangla, Renkapur, Dapura, Jalgaon, Aurungpur. Reserve. ...	153	...	...	...	153	...	...	
		Phiski Reserve ...	2,342	4	...	...	2,342	4	...	
		Tiwsala do. ...	3,593	6	...	...	3,593	6	...	
		Bhiokund do. ...	3,433	5	...	...	3,433	5	...	
		Krishnapur Reserve ...	3,933	6	...	...	3,933	6	...	
		District Reserved Forests.								
Direction Division ..	Ellichpur District ...	Ellichpur District ...	4,491	7	31,366	...	35,857	56	Berar Secretary's No. 935, dated 16th April 1883.	
	Amraoti do. ...	Amraoti do. ...	26,268	41	124,059	...	150,327	235	2nd Asst. Resident's No. 1720, dated 20th July 1883.	
	Akola do. ...	Akola do. ...	49,233	77	...	9	49,224	77	...	
	Buldana do. ...	Buldana do. ...	5,132	8	...	...	5,132	8	...	
	Wun do. ...	Wun do. ...	70,652	110	620	...	71,272	111	...	
	Basim do. ...	Basim do. ...	25,383	40	82	...	25,465	40	...	
		Total ...	888,821	1,389	157,253	9	1,046,065	1,635	...	

FORESTS.

ANNUAL FORM No. 49.—*Area of Unreserved Forests*, 1883-84.

Division or range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in square miles.	No. and date of Notification of addition or transfer.	Remarks.
	Unreserved Forests managed by Forest Officers.									
Melghat Division ...	Ellichpur District..	Melghat Taluk ...	586,400	916	...	...	586,400	916		
		Ellichpur Taluk (land in Melghat Hills.) ...	5,815	9	...	5,815	...	...	Berar Secretary's No. 935, dated 16th April 1883.	
		Daryapur Taluk (land in Melghat Hills.) ...	1,591	3	...	1,591	...	...		
	Akola District ..	Akot Taluk (land in Melghat Hills.) ...	1,460	2	...	...	1,460	2		
		Jalgaon Taluk (land in Melghat Hills.) ...	4,476	7	...	...	4,476	7		
Amraoti Division.	Amraoti District...	Amraoti Taluk (land in Amraoti Hills.) ...	4,048	6	...	1,690	2,358	4	Second Assistant Resident's No. 1720, dated 20th July 1883.	
		Chandur Taluk (land in Amraoti Hills.) ...	3,408	5	...	2,405	1,003	2		
	District Unreserved Forests.									
Direction Division ...	Ellichpur District ...	Ellichpur District ..	24,663	39	...	24,303	360	1	Berar Secretary's No. 935, dated 16th April 1883.	
	Amraoti do. ...	Amraoti do. ...	62,672	98	...	48,510	14,162	22	Second Assistant Resident's No. 1720, dated 20th July 1883.	
	Akola do. ...	Akola do. ...	81,898	128	2,576	3,005	81,469	127		
	Buldana do. ...	Buldana do. ...	188,903	295	2,247	17,357	173,793	272		
	Wun do. ...	Wun do. ...	472,302	738	...	26,124	446,178	697		
	Basim do. ...	Basim do. ...	453,757	709	6,156	5,288	454,627	710		
		Total ...	1,891,393	2,955	10,981	136,088	1,766,286	2,760		

ANNUAL FORM No. 50.—*Area of Plantations*, 1883-84.

Division.	Name of Plantation.	On 1st April 1883. Area.	On 1st April 1883. Cost.	Added during 1883-84. Area.	Added during 1883-84. Cost.	On 31st March 1884. Total area.	On 31st March 1884. Total cost.	Remarks.
	Regular Plantations, Bairagarh Reserve.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	
Melghat Division.	Pili	52	2,112	...	...	52	2,112	Teak.
	Rakiadah	13	2,163	...	...	13	2,163	Do. and bamboo.
	Sembadah	2	28	...	...	2	28	Do. do.
	Dugapati	11	435	...	...	11	435	Do. do.
	Pipalcota	160	5,083	...	...	160	5,083	Do. do.
	Saoli	110	4,860	...	...	110	4,860	Do. do.
	Bujru	31	2,259	...	...	31	2,259	Do. do.
	Labu	279	3,972	...	...	279	3,972	Do. do.
	Saoli and Kurita ...	30	2,233	...	...	30	2,233	Do. do.
	Jambulwaree ...	600	4,325	..	...	600	4,325	Do. do.
	Abapur	120	5,072	...	...	120	5,072	Do. do.
	Kolkas	1	1,027	..	91	1	1,118	Forest garden.
	Miscellaneous charges...	...	271	...	162	...	433	
	Total Regular Plantations ...	1,409	33,840	...	253	1,409	34,093	
	Cultural Operations.							
Direction Division ...	Ellichpur District ...	...	40	...	37	...	77	Sowing avenues with babul.
	Amraoti do. ...	1	141	...	403	1	544	Nursery of fruit trees at Karanja for roadside planting.
	Buldana do. ...	...	...	...	6	...	6	Collecting babul seed.
	Miscellaneous charges ...	...	...	...	39	...	39	
Melghat Division ...	Gugumal Reserve ...	...	37	...	98	...	135	Broad-cast sowings.
Amraoti do. ...	Amraoti Hills ...	303	12	330	489	633	501	Sowing blanks with babul, tewas and bamboo.
South Berar Division ...	Loni Reserve ..	250	214	20	216	270	430	Sowing blanks with babul and prosopis.
	Bhongaon Reserve ...	347	209	...	132	347	341	Do. do.
	Miscellaneous charges...	...	...	...	74	...	74	Collecting babul seed.
Wun Division ...	Miscellaneous charges...	...	...	...	30	...	30	Do. do.
	Total Cultural Operations	901	653	350	1,524	1,251	2,177	
	Grand Total ...	2,310	34,493	350	1,777	2,660	36,270	

FORESTS.

ANNUAL FORM No. 51.—*Area of Forest tracts protected from fire during dry season*, 1884.

Division.	Forest tracts.	Up to 30th June 1883. Area actually protected.	Up to 30th June 1883. Total cost.	During dry season of 1884. Area attempted to be protected.	Failures	Actually protected.	Amount expended.	Total cost up to 30th June 1884.	Year when protection commenced.	Remarks.
		Acres.	Rs.	Acres.	Acres.	Acres.	Rs.	Rs.		
Direction Division.	District Reserves.	...	89	...	...	...	33	122	...	Miscellaneous expenditure.
Melghat Division.	Bairagarh Reserve, Raipur block.	14,231	6,291	14,231	...	14,231	223	6,514	1870	
	Remainder of Reserve.	257,818	5,973	257,818	113	257,705	1,240	7,213	1872	
	Gugumal Reserve.	115,200	3,168	115,200	...	115,200	368	3,536	1877	
	Chikalda Reserve.	2,400	67	2,400	...	2,400	11	78	1880	
	Total ...	389,649	15,499	389,649	113	389,536	1,842	17,341		
Amraoti Division.	Amraoti Hills Reserve.	15,585	1,081	13,071	...	13,071	527	1,618	1881	
South Berar Division.	Gerumatergaon Reserve.	42,192	3,371	45,992	70	45,922	365	3,733	1880	
	Ghatbori Reserve	28,000	2,361	29,235	700	28,535	266	2,627	1881	
	Penganga do.	10,295	1,698	11,575	1,200	10,375	139	1,837	1880	
	Loni and Bhongaon Reserve.	2,274	5	2,276	...	2,276	...	5	1882	
	Rui Reserve.	6,245	113	6,647	1,620	5,027	176	289	1882	
	Amdagi Reserve.	...	...	13,717	50	13,667	295	295	1883	
	Total ...	89,006	7,548	109,442	3,640	105,802	1,241	8,789		
Wun Division.	Kinwat Reserve.	50,638	3,062	52,558	1,406	51,152	983	4,045	1881	
	Kelapur do.	20,318	1,251	40,747	29,900	10,847	513	1,764	1881	
	Darwha Range.	51,535	696	51,965	8,320	43,645	1,152	1,848	1882	
	Wun do.	5,909	206	13,301	5,032	8,269	175	381	1882	
	Total ...	128,400	5,215	158,571	44,658	113,913	2,823	8,038		
	Grand Total ...	622,640	29,432	670,733	48,411	622,322	6,476	35,908		

Charged in previous years	28,650
Do. 1883-84	6,053
Do. 1884-85	1,205
Total ...	35,908

ANNUAL FORM No. 52.—*Prosecutions for breaches of Forest Rules during* 1883-84.

Forest Division and Civil District.	Cases pending from 1882-83.	New cases of the year. Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Disposed of during the year. Convictions. Cases	Convictions. Persons.	Acquittals. Cases	Acquittals. Persons.	Total. Cases	Total. Persons.	Cases pending at close of year.
Direction Division.														
Ellichpur District ...	...	...	19	...	...	19	19	11	15	8	10	19	25	...
Amraoti do.	...	1	25	9	4	39	39	33	67	6	15	39	82	...
Akola do.	...	4	3	2	75	84	84	72	124	12	26	84	150	...
Buldana do.	...	1	13	4	4	22	22	19	41	2	2	21	43	1
Wun do.	...	...	14	...	...	14	14	12	18	1	13	13	31	1
Basim do.	...	...	15	...	...	15	15	11	16	4	5	15	21	...
Melghat Division.														
Reserved Forests ...	...	...	10	...	6	16	16	15	35	1	1	16	36	...
Unreserved Forests.	...	...	...	2	111	113	113	95	161	18	18	113	179	...
Amraoti Division.														
Amraoti Hills Reserve.	...	..	3	8	11	22	22	19	55	3	5	22	60	...
South Berar Division														
Reserved Forests ...	...	4	9	2	3	18	18	14	28	4	7	18	35	...
Wun Division.														
Reserved Forests ...	...	...	7	12	...	19	19	13	64	4	45	17	109	2
Total ...	...	10	118	39	214	381	381	314	624	63	147	377	771	4

FORESTS.

ANNUAL FORM No. 53.—*Summary of Revenue and Expenditure of the different Divisions during 1883-84.*

Budget Heads—Revenue.	Direction Division.	Melghat Division.	Southern Division.	Wun Division.	Amraoti Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the Forests by Government Agency :—						
a. Timber	...	...	...	...	...	...
b. Firewood and charcoal	...	...	...	...	...	...
c. Bamboos	...	...	...	...	...	...
d. Sandal-wood	...	...	...	...	...	...
e. Grass and other minor produce ...	...	...	...	...	...	...
II.—Timber and other produce removed from the forests by consumers or purchasers :—						
a. Timber	4,875 15 11	80,774 12 3	1,483 8 0	49 0 0	76 15 9	87,260 3 11
b. Firewood and charcoal	11,566 12 0	7,504 2 6	1,311 5 9	8 4 0	1,547 9 9	21,938 2 0
c. Bamboos	574 9 0	30,563 14 3	...	825 8 0	...	31,963 15 3
d. Grazing and fodder grass	1,12,013 10 0	11,698 8 0	3,000 13 6	3,762 6 0	6,259 10 0	1,36,734 15 6
e. Other minor produce	15,914 9 10	2,986 11 0	54 0 0	6 15 0	39 8 6	19,001 12 4
III.—Confiscated, drift and waif wood ...	7,370 6 9	222 0 10	...	4 0 0	103 9 6	7,700 1 1
IV.—Revenue from forests not managed by Government :—						
a. Duty on foreign timber and other forest produce	...	...	...	...	...	...
b. Revenue from shared and private forests...	...	...	...	...	...	...
V.—Miscellaneous :—						
a. Fines and forfeitures	...	...	...	337 0 3	...	337 0 3
b. Refunds	37 7 3	43 15 9	45 4 2	14 3 7	...	140 14 [illegible]
c. Other sources	2,304 11 0	295 11 9	31 1 9	...	...	3,140 3 10
		+508 11 4 *a*				
Total Revenue ...	1,54,658 1 9	1,34,089 12 4	5,926 1 2	5,007 4 10	8,027 5 6	3,08,217 4 11
		+508 11 4				

Summary of Revenue and Expenditure.

Budget Heads.	Direction Division.	Melghat Division.	Southern Division.	Wun Division.	Amraoti Division.	Total.
EXPENDITURE.						
A.—CONSERVANCY AND WORKS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forests by Government Agency :—						
a. Timber	...	...	...	...	...	...
b. Firewood and charcoal	...	...	...	...	...	...
c. Bamboos	...	...	...	...	...	...
d. Sandal-wood	...	...	...	...	...	...
e. Grass and other minor produce ...	...	...	...	...	...	...
II.—Timber and other produce removed from the forests by consumers or purchasers ...	307 8 3	570 10 10	...	...	...	878 3
III.—Confiscated, drift and waif wood ...	...	...	...	...	...	...
IV—Revenue from forests not managed by Government :—						
a. Duty on foreign timber and other forest produce	...	...	...	...	...	...
b. Revenue from shared and private forests...	...	...	...	...	...	...
V.—Rent of leased forests and payments to shareholders in forests managed by Government ...	...	17,119 12 0	...	...	...	17,119 12
VI.—Live stock, stores, tools and plant :—						
a. Purchase of cattle...	...	...	...	...	...	...
b. Feed and keep of cattle	777 8 11	880 5 6	734 9 1	...	...	2,392 2
c. Stores, tools and plant	375 7 10	352 3 0	5 0 8	117 9 0	88 9 0	938 13
VII.—Communications and buildings :—						
a. Roads and bridges	0 4 0	7,476 0 9	50 5 0	[illegible] 12 0	30 0 0	7,562 5
b. Buildings	134 5 2	1,769 13 10	136 1 6	132 11 0	...	2,172 15
c. Other works	...	342 12 0	...	...	...	342 12
VIII.—Demarcation, improvement, and extension of forests :—						
a. Demarcation	108 11 6	320 4 0	523 4 3	1,087 7 9	99 8 6	2,187 10
				+48 6 0 *b*		
b. Compensation for land and rights ...	2 0 0	...	...	...	...	2 0
c. Surveys and working plans	...	5,526 12 2	...	48 6 0	...	5,526 12
				—48 6 0 *b*		
d. Plantations	965 14 6	350 11 4	421 15 10	30 0 0	8 5 0	1,77[illegible]
e. Protection from fire	113 5 5	1,675 12 2	1,242 1 10	2,551 14 3	469 15 8	6,053 1
f. Other works	321 15 0	278 3 0	...	...	...	600 2
IX.—Miscellaneous :—						
a. Refunds	22 2 0	1,509 10 2	78 8 0	...	...	1,933 10
			+323 6 0 *a*			
b. Law charges	...	...	...	...	...	...
c. Other charges	1,555 13 2	1,214 0 6	48 9 0	...	3 2 0	2,821 8
Total A.—Conservancy and Works...	4,684 10 9	39,386 15 3	3,240 7 2	3,973 12 0	699 8 2	52,308 11
			+323 6 0			

a.—These are in adjustment of old Forest differences which existed prior to 1878-79.
b.—*Vide* Conservator's No. 64, dated 26th April 1884.

FORESTS.

Summary of Revenue and Expenditure—(Continued.)

Budget Heads.	Direction Division.	Molghat Division.	Southern Division.	Wun Division.	Amraoti Division.	Total.
EXPENDITURE—(*Continued.*)	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought over Total A.—Conservancy and Works.	4,684 10 9	39,386 15 3	3,240 7 2 +323 6 0	3,973 12 0	699 8 2	52,308 11 4
B.—ESTABLISHMENTS.						
I.—Salaries :—						
a. Conservators	14,379 0 6	...	...	...	...	14,379 0 6
b. Superior Officers	1,300 0 0	8,193 5 4	6,896 10 8	6,879 13 5	1,400 0 0	24,669 13 5
c. Subordinate Forest and Depôt Establishments	6,212 2 1	14,608 2 4	4,612 15 1	4,674 8 11	1,088 5 1	31,196 1 6
d. Office Establishments	3,569 1 6	3,583 3 1	1,882 6 2	983 14 0	293 14 3	10,312 7 0
e. Deputation and special allowances ...	...	...	13 5 6	...	...	13 5 6
II.—Travelling Allowances :—						
a. Conservators	1,137 0 0	...	...	...	...	1,137 0 0
b. Superior Officers...	61 12 0	1,897 15 3	1,552 2 0	1,220 12 0	340 14 8	5,073 7 11
c. Subordinate Forest and Depôt Establishments	30 2 4	178 9 7	9 8 0	20 8 0	7 15 4	246 11 3
d. Office Establishments	150 1 8	470 4 8	376 5 7	172 14 0	69 14 8	1,239 8 7
III.—Contingencies :—						
a. Stationery	135 14 0	64 12 3	14 3 0	29 8 0	6 9 6	250 14 9
b. Carriage of tents and records ...	415 12 3	663 8 10	581 2 6	320 0 0	160 6 8	2,140 14 3
c. Rents, rates and taxes	135 7 8	400 0 0	...	...	...	535 7 8
d. Pay of police guards	...	...	...	...	...	...
e. Official postage	243 4 0	260 1 0	137 3 0	50 1 6	11 10 6	702 4 0
f. Sundries	11,680 4 2	376 7 10	109 1 6	129 14 2	37 12 0	12,333 7 8
Total B.—Establishments ...	39,449 14 2	30,696 6 2	16,184 15 0	14,481 14 0	3,417 6 8	1,04,230 8 0
Grand Total of all expenditure ...	44,134 8 11	70,083 5 5	19,425 6 2 +323 6 0	18,455 10 0	4,116 14 10	1,56,539 3 4

COMPTROLLER'S OFFICE,
BOLARUM,
The 23rd May 1884.

FRED. ATKINSON,
Comptroller,
Hyderabad.

ANNUAL FORM No. 54.—*Account Current for the year* 1883-84.

Dr.

	Rs. a. p.	Rs. a. p.
To *cash balance* ...		2,680 11 7
„ *III.—Forest* ...	3,08,217 4 11	
„ *Service Funds* ...	...	
„ *Deposits* ...	...	
„ *Forest cash remittances, local :—* ...		
Forest cheques drawn.	1,56,001 11 5	
Inter-divisional transfers	337 5 7	
		4,64,556 5 11
„ *Advances recoverable* ...	48,142 1 6	
„ *Permanent advances* ...	650 0 0	
„ *Suspense*	...	
Account current (Other Governments) ...	730 1 8	
„ *Inter-departmental transfers* ...	61 1 11	
		49,583 5 1
Total ...		5,16,820 6 7

Cr.

	Rs. a. p.	Rs. a. p.
By 3.—*Refunds and drawbacks* (Revenue refunds--Forests.)	...	
„ 5.—*Forests* ...	1,56,539 3 4	
„ *Deposits* ...	...	
„ *Forest cash remittances, local :—*		
Remittances to treasuries ...	3,06,970 14 6	
Inter-divisional transfers	337 5 7	
Cancelled cheques ...	678 5 4	
		4,64,525 12 9
„ *Advances recoverable*..	47,568 9 7	
„ *Suspense* ...	...	
„ *Account current (Other Governments)* ...	473 4 6	
„ *Inter-departmental transfers* ...	285 6 9	
		48,327 4 10
„ *Cash balance* ...	...	3,967 5 0
Total ...		5,16,820 6 7

COMPTROLLER'S OFFICE,
BOLARUM,
The 23rd May 1884.

FRED. ATKINSON,
Comptroller,
Hyderabad.

FORESTS.

ANNUAL FORM No. 55.—*Outstandings and liabilities on account of Contractors and Disbursers during* 1883-84.

Division.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of the year.	Recoveries in cash and value of supplies and work commenced during the year.	At close of year.	At commencement of year.	Payment made during year.	At close of year.	To department outstanding.	By department liability.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Direction.	...	21,173 14 9	21,173 14 9	10,672 7 4	20,512 4 3	31,184 11 7	10,010 12 10	...
Melghat...	...	9,812 9 10	9,812 9 10	5,365 13 8	10,100 15 1	15,466 12 9	5,654 2 11	...
Southern.	...	7,753 5 0	7,753 5 0	670 10 4	7,873 0 0	8,543 10 4	790 5 4	...
Wun ...	...	9,078 13 11	9,078 13 11	704 10 6	8,573 10 11	9,278 5 5	199 7 6	...
Amraoti..	...	...	...	...	...	...	...	...
Total...	...	47,818 11 6	47,818 11 6	17,413 9 10	47,059 14 3	64,473 8 1	16,654 12 7	...

COMPTROLLER'S OFFICE, BOLARUM,
The 23rd *May* 1884.

FRED. ATKINSON,
Comptroller, Hyderabad.

ANNUAL FORM No. 56.—*Revenue received and outstandings on account of revenue during* 1883-84.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
			Rs. a. p.	Rs. a. p.	Rs. a. p.		
Direction ...	Timber and other revenue.	...	1,54,658 1 9	1,54,658 1 9	1,54,658 1 9	...	
Melghat ...	Do. ...	...	1,34,598 7 8	1,34,598 7 8	1,34,598 7 8	...	
Southern ...	Do. ...	...	5,926 1 2	5,926 1 2	5,926 1 2	...	
Wun ...	Do. ...	...	5,007 4 10	5,007 4 10	5,007 4 10	...	
Amraoti ...		...	8,027 5 6	8,027 5 6	8,027 5 6	..	
	Total ...	...	3,08,217 4 11	3,08,217 4 11	3,08,217 4 11	...	

COMPTROLLER'S OFFICE, BOLARUM,
The 23*rd May* 1884,

FRED. ATKINSON,
Comptroller, Hyderabad.

ANNUAL FORM No. 57.—*Financial results of the year* 1883-84.

Division.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvement of forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
			Rs.	Rs.	Rs.	Rs.	Rs.	
Direction Division ...	...	...	1,54,658	32,338	11,796	1,54,658	44,134	
Amraoti do. ...	...	...	8,027	2,632	1,485	8,027	4,117	
Melghat do. ...	...	...	1,34,599	44,360	25,723	1,34,599	70,083	
South Berar do. ...	...	...	5,926	13,145	6,604	5,926	19,749	
Wun do. ...	...	...	5,007	10,949	7,507	5,007	18,456	
Total ...	...	...	3,08,217	1,03,424	53,115	3,08,217	1,56,539	

FORESTS.

ANNUAL FORM No. 58.—*Trees felled by Government Agency during the year* 1883-84.—(*Improvement fellings.*)

Division.	Trees felled.		Remarks.
	Description.	Number.	
Melghat Division	Teak	1,614	Felled in the Bairagarh Reserve.
	Tewas	8	
	Dowra	63	
	Sadra	18	
	Lendya	35	
	Moheen	7	
	Kuram	8	
	Dhamin	11	
	Kekda	5	
	Haldu	34	
	Chironji	2	
	Tendu	10	
	Bher	1	
	Aola	1	
	Behera	5	
	Total ...	1,822	

FORESTS.

Annual Form No. 63.—*Timber and other produce cut, collected, and removed from the Forests by consumers or purchasers, including pasture, during the year* 1883-84.

Division.	Produce removed. Description.		No. or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
				Rs.	Rs.	
Direction Division.	Timber		...	4,790	4,790	II. *a.*
	Firewood		...	10,749	10,749	II. *b.*
	Bamboos		...	574	574	II. *c.*
	Grass		...	1,08,388	1,08,388	II. *d.*
	Minor produce		...	15,854	15,854	II. *e.*
	Total Revenue under II.		...	1,40,355	1,40,355	
Amraoti Division.	Timber of kinds	C. ft.	1,139	162	162	II. *a.*
	Firewood	C. ft.	141,228	2,366	2,366	II. *b.*
	Grass	lbs.	5,982,322	3,860	3,860	
	Grazing buffaloes		5,891	1,571	1,571	
	" cows and bullocks		26,289	3,455	3,455	
	" sheep and goats		14,878	999	999	II. *d.* = 9,985.
	Total Grazing		47,058	6,025	6,025	
	Minor produce	lbs.	162,913	100	100	II. *e.*
	Total Revenue under II.			12,513	12,513	
Melgha Division.	Teak trees		1,564	2,000		
	Towas "		8	14		
	Dowra "		63	62		
	Sadra "		18	32		
	Lendya "		35	40		
	Moheen "		7	4		
	Kuram "		8	9		
	Dhamin "		11	9		
	Kekda "		5	9		
	Haldu "		34	102		
	Chironji "		2	1		
	Tendu "		10	8		
	Bher "		1	1		
	Aola "		1			
	Behera "		5	2		
	Total trees	Nos.	1,772	2,293	2,293	
	Teak, Towas, and Shesum	C. ft.	192,612	55,060		II. *a.* = 80,775.
	Other wood	"	163,899	23,422		
	Total timber	"	356,511	78,482	78,482	
	Firewood	"	165,756	4,530		
	Fuel and charcoal	"	129,382	2,974		
	Total Firewood and Charcoal	"	295,138	7,504	7,504	II. *b.*
	Bamboos	Nos.	3,056,388	30,564	30,564	II. *c.*
	Grass	lbs.	4,745,160	1,472	1,472	
	Grazing camels	Nos.	127	32		
	" buffaloes	"	16,433	2,169		
	" cows and bullocks	"	87,458	6,375		II. *d.* = 11,699.
	" sheep and goats	"	51,527	1,651		
	Total Grazing		165,545	10,227	10,227	
	Teak leaves	lbs.	667,732	803		
	Roots and fruits	"	1,307,835	1,954		
	Lac	"	22,747	161		
	Gum	"	3,826	15		
	Miscellaneous	"	17,298	54		
	Total Minor Produce		2,019,458	2,987	2,987	II. *e.*
	Total Revenue under II.		...	1,33,529	1,33,529	
South Berar Division	Timber	C. ft.	8,246	1,484	1,484	II. *a.*
	Firewood	"	19,387	1,311	1,311	II. *b.*
	Grass	lbs.	10,080,143	3,001	3,001	II. *d.*
	Minor produce	"	...	54	54	II. *e.*
	Total Revenue under II		...	5,850	5,850	
Wun Division	Timber	C. ft.	112	49	49	II. *a.*
	Firewood	"	364	8	8	II. *b.*
	Bamboos	Nos.	82,550	826	826	II. *c.*
	Grass	lbs.	7,823,340	3,762	3,762	II. *d.*
	Minor produce	"	...	7	7	II. *e.*
	Total Revenue under II.		...	4,652	4,652	
	Total Revenue of the Circle under II.			2,96,809	2,96,809	

FORESTS.

ANNUAL FORM No. 65.—*Abstract showing the value of live stock, stores, tools and plant, for the year* 1883-84.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
			Rs.			Rs.			
Direction Division.									
Surveying and other instruments.	21	...	...	19	...	...			
Tools	338	...	...	286	...	...			
Furniture	170	...	...	154	...	100			
Tents	9	...	1,830	7	...	1,439			
Miscellaneous stores ...	137	...	...	116	...	...			
Elephant	1	...	3,000	1	...	3,000			
Total ...	676	...	4,830	583	...	4,539			
Amraoti Division.									
Surveying and other instruments.	...	...	...	2	...	4			
Tools	...	..	...	48	...	9			
Furniture	...	...	...	37	...	136			
Tents	...	..	...	3	...	510			
Miscellaneous stores ...	...	..	...	20	...	18			
Total ...	..	...	...	110	...	677			
Melghat Division.									
Surveying and other instruments.	16	...	...	14	...	...			
Tools	664	...	...	635	...	...			
Furniture	151	...	...	162	...	315			
Tents	6	...	1,076	4	...	711			
Bungalows	2	...	8,000	2	...	8,000			
Miscellaneous stores ...	211	...	...	212	...	...			
Elephant	1	...	1,283	1	...	1,283			
Bullocks	7	...	195	7	...	195			
Total ...	1,058	...	10,554	1,037	...	10,504			
South Berar Division.									
Surveying and other instruments.	6	...	...	6	...	...			
Tools	198	...	...	199	...	...			
Furniture	43	...	...	50	...	...			
Tents	9	...	622	9	...	622			
Miscellaneous stores ...	53	...	...	68	...	90			
Elephant	1	...	1,112	1	...	1,112			
Total ...	310	...	1,734	333	...	1,824			
Wun Division.									
Surveying and other instruments.	26	...	...	23	...	...			
Tools	175	...	...	161	...	...			
Furniture	27	...	...	30	...	110			
Tents	3	...	581	3	...	581			
Miscellaneous stores ...	39	...	...	57	...	94			
Total ...	270	...	581	274	...	785			
Grand Total ...			17,699	Total ...		18,329			

A. T. DRYSDALE,

Conservator of Forests,

Hyderabad Assigned Districts.

Extract from the Proceedings of the Resident at Hyderabad, No. 2276, dated Hyderabad Residency, the 13th September 1884.

Read—

The Annual Report on Forests in the Hyderabad Assigned Districts for the year 1883-84.

RESOLUTION.

THE number of Forest Divisions was not changed, nor the constitution of the Department, during 1883-84; but the scheme which the Inspector General has suggested is in process of being carried out. By it each revenue district becomes a forest division, and each forest officer in charge of a division will work in direct subordination to the Deputy Commissioner of the district; the Conservator alone controlling in matters of professional detail. The change will raise the number of Forest Divisions to six; but it should not in the end prove a more expensive system because it will certainly be possible, if indeed it may not be found to be essential, to work with divisional officers of much lower rank and less pay than the Deputy and senior Assistant Conservators who are now in Berar.

2. It is to be hoped that the new system when it has been fully enforced will also be productive of more harmonious working of the forests than can be said for all the province now, in one division of which, at least, the friction between the revenue and forest officers is adduced by the latter themselves as the chief cause of failure in the most important work of fire conservancy. It is the more to be regretted, as this is the second year that the Kelapur Reserve has been badly burned, and though the Forest Officer has been changed, still the same reason is put forward.

3. The Forest Department has undertaken the re-classification of all waste lands not already appropriated as State Reserves. It is a work which has to be very carefully done; for, dealing as it does, with all lands on which villagers may graze, the conflicting interests of forest conservancy and people's rights must be most tenderly dealt with. In seven out of 21 taluks the proposals have received sanction. By these schemes the waste land is broadly divided into what is available for cultivation and what constitutes the District Forest Reserves, that is, land set apart as "woods," "runmas," and "grazing lands," and the inclusion of such land as has been thus determined during the year has considerably increased the area shown as Forest Reserves, under which head 527 square miles are now returned. This classification and extension of cultivation somewhat reduced the area of Unreserved District Forests.

4. Survey work appears to have progressed steadily in the South Berar Division on the boundaries of the Kinwat and Kholapur reserves, and also in the Melghat, where 1,103 square miles were triangulated, of which for 888 square miles the streams, roads, forest, and village boundaries have been carefully defined. The demarcation of villages connected with State Reserves has also been steadily progressing.

5. The new Forest Regulations for Berar are still before the Government of India. Prosecutions for breaches of existing Forest rules have somewhat decreased, in comparison with those of the previous year.

For State Forests there were 75 cases with 61 convictions, and for District Forests 306 cases with 253 convictions. The principal offences were cooking food in unauthorized places, carrying fire, wrongful felling of wood, evading payment of dues, grazing in closed tracts, and cutting fuel without permission.

6. With the exception of the one at Kelapur the reserves appear to have been fairly protected from fire. Eleven fires are reported from the South Berar, and thirteen from the Wun Division, one in the Melghat and none in the Amraoti Division. Some are attributed to incendiarism, but apparently none of the offenders have been detected.

7. Considerable progress has been made in the construction of tanks and anicuts in the Melghat and Amraoti Hills, and if, as surmised by the Executive Engineer, most of the works will be completed by the end of the year, a great step will have been made towards developing the grazing capabilities of the Melghat District.

8. The extension of roads in the same district is also a matter for congratulation. The completion of the Sambadah-Biba road and that of the Sambadah-Chikalda road will materially assist the development of forest resources, and enable the local authorities to judge how outlets to the plains can best be constructed. But the Resident cannot believe that another metalled road is at all necessary to connect the hill station of Chikalda with Ellichpur. The development of the Gugamal Reserve should not be lost sight of.

9. The revenue of the past year is the highest that has been realized since the formation of the department. A net surplus of Rs. 1,51,978 was realized, which shows an excess of Rs. 14,610 over the surplus of the previous year. From the returns it appears that four-fifths of the receipts are derived from the sale of grass and grazing dues, and that but a small proportion is acquired from the sale of timber.

This is not to be wondered at, as with the exception of the Melghat, where only the badly grown trees are cut, all the reserves are enjoying rest, the only produce exported from them being grass, dead and fallen wood, and bamboos.

The suggestion conveyed in para. 49 of this report to allow light grazing during the rainy season for a certain number of cattle in half the area of each forest is made by the Conservator with a view to increasing the revenue from those reserves without trenching upon capital. It is questionable whether the measure will have much effect, for he will open the reserves to grazing just at that time of the year when grazing is most plentiful close at home.

10. The Resident would be glad to see the efforts of the Department, especially in the Wun District, turned to the formation in favourable spots of teak plantations. These should be of dimensions that admit of constant and frequent personal superintendence. The present mode of treating the reserves, except in the Melghat, appears to him to suffer from want of concentration on definite and fixed objects.

11. With regard to the main work performed during the year under report, *viz.*, the re-classification of grazing tracts, Mr. Cordery has felt himself compelled to proceed cautiously, and has only given a probationary sanction to the measures laid before him, subject to a report at the close of the next marching season upon their effects. Though four-fifths of the income of the Department is derived from the sources mentioned in the foregoing para., the management of such tracts cannot fairly be conducted on principles which are applicable to forestry alone, but must also be followed by many other considerations. Berar is so fortunately placed that a total, or even a perilous failure of the rain-fall is extremely improbable in the province. The danger of any deficiency in grass being consequently slight, many restrictions, desirable elsewhere, become in Berar superfluous, and are resented as unnecessary interferences with ancient customs and rights. In saying this, however, he is only speaking of his own part in the Administration, and he is glad to be able to record his high opinion of the generally conciliatory temper shown by the present Conservator, Mr. Drysdale, in the introduction of measures that often cannot fail to be unpopular in the immediate neighbourhood of such changes.

(By order,)

W. J. CUNINGHAM,

Secretary for Berar.

No. 110 F., dated Calcutta, the 7th February 1885.

From—D. FITZPATRICK, Esq., C.S., Offg. Secretary to the Government of India, Home Department.

To—The Resident at Hyderabad.

I AM directed to acknowledge the receipt of the letter from your Secretary for Berar, No. 326 G., dated the 16th September last, submitting the Progress Report of Forest Administration in the Hyderabad Assigned Districts for the year 1883-84, with the Commissioner's remarks and your orders on it.

Areas.

2. The areas with which the Department is concerned have during the year undergone the following changes :—

CLASS OF FORESTS.	AREA, IN SQUARE MILES.			
	At the commencement of the year.	Increase.	Decrease.	At the close of the year.
State Reserves	1,106	2	...	1,108
District Reserves	283	244	..	527
Unreserved Forests	2,955	...	195	2,760
TOTAL ...	4,344	51	...	4,395

The increase under reserves is due to the re-classification of the unreserved forests. The increase in the total forest area is said to be the result of variations in the area under cultivation; but it seems doubtful whether this really explains the increase.

3. The re-classification has now been completed over all the 21 taluks, but orders have only been passed on the recommendations made regarding seven. If the re-classification as proposed is sanctioned, the total area of wood lands, rhamnas, and grazing grounds will amount to 3,474 square miles, which is equal to 20 per cent. of the total area of the province. This, with the unculturable waste included in private estates, should be sufficient for all requirements. The area made available for the extension of cultivation amounts to 479 square miles.

Organization.

4. The three principal forest Districts are Ellichpur, Wún, and Basim, while smaller areas of forests are situated in Buldana, Akola, and Amraoti. A staff of three Deputy and Assistant Conservators and of three Sub-Assistant Conservators has, since the close of the year, been sanctioned, and each of these six Officers now holds charge of the forest lands in one District. The District Forest Officer works in direct subordination to the Deputy Commissioner, while the Conservator of Forests controls the finances, the organization and distribution of the staff, and advises on all professional matters. It is hoped that the new organization will produce harmony amongst the officers concerned; but it is observed that the failure in the matter of protection against fire in the Wún District is ascribed by the Conservator, in part at least, to friction between the Revenue and the Forest Officers. The attention of the Commissioner should be specially directed to this matter. It should be impressed on the District Forest Officers that they are subordinate to the Deputy Commissioners, and on the latter that they will be expected to take a proper amount of interest in the management of the forest estates.

If these points are insisted on, the new organization is sure to result in much good; otherwise the interests of the rural population and of the State generally are likely to suffer.

5. It is said that it will certainly be possible, if not essential, to work with District Forest Officers of much lower rank and less pay than the Deputy and Assistant Conservators who are now in Berar. In regard to this view, I am to say that, whatever may be practicable or advisable hereafter, such a proposal cannot be entertained at present. The Government of India has, after full consideration and with the expenditure of much money and labour, made arrangements for an efficient controlling Forest staff, which is absolutely required for the performance of duties surrounded by many technical questions. The benefit which these measures have produced is so apparent that His Excellency in Council is averse to increase at present the number of Sub-Assistant Conservators beyond one-half of the number of District Forest Officers in Berar. One of the principal duties of the controlling staff is the training of an efficient executive staff, to which the Sub-Assistant Conservators belong. By removing the three Deputy and Assistant Conservators from Berar, this advantage would be altogether lost, and the step would speedily be followed by a retrograde movement in Forest conservancy. Under any circumstances, the interests at stake in the Melghat forests are so great that the suggestion of entrusting them to an inferior class of officers is altogether out of the question.

Surveys.

6. The work of surveying the Melghat forests and of the South Berar reserves has made some progress during the year. In the former District 1,103 square miles were triangulated and a portion of the area traversed. In South Berar the boundaries of the Kinwat and Kelapur Reserves were surveyed. It will take some years, however, to complete the surveys.

Protection.

7. The number of breaches of forest rules during the year amounted to 381, against 437 in the previous year. The percentage of convictions was 83, as compared with 86 in 1882-83.

8. The results of fire conservancy were as follow, compared with those of the previous year:—

Year.	Area, in square miles.			Proportion of failures to area attempted, in per cent.
	Attempted.	Protected.	Failures.	
1883-84	1,048	972	76	7
1882-83	1,034	973	61	6
Increase in 1883-84	14	...	15	1
Decrease " "	...	1	...	...

The cost came to Rs. 7 per square mile successfully protected. The results are slightly less favourable than in the previous year, which seems to be due to the burning of the greater portion of the Kelapur Reserve in the Wún District. The continued success in the valuable Melghat Reserves is a matter for congratulation.

Reproduction of the Forests.

9. The progress of natural reproduction is reported as good on all areas which have been successfully protected against fire. The regular plantations have not been extended, but 20 acres have been

sown with babul, while 330 acres have been added to the list, in consequence of a correction of areas. The total results are now as follow :—

	Area, in acres.		
	At the commencement of the year.	Added.	At the close of the year.
Regular plantations	1,409	...	1,409
Other cultural operations	901	350	1,251
Total ...	2,310	350	2,660

10. You are of opinion that the efforts of the Department should be turned to the formation, in favourable spots, of teak plantations. The subject has been referred to in the orders of the Government of India on previous Reports, and also in the Reports of the Inspectors General of Forests on Forest Administration in Berar. His Excellency in Council agrees with you that more should be done in this direction than has been effected during the past few years. At the same time, it should not be overlooked that successful protection of the principal reserves against fire is the most powerful aid in augmenting the growing stock, and that plantations should, as pointed out by you, only be made in favourable localities; that is to say, on good soil and where the seedlings are not likely to be exposed to damage from frost. Unless these precautions are taken, the results are not likely to be commensurate with the outlay.

Yield of Forests.

11. The departmental timber operations are restricted to the cutting of badly-shaped trees in the Melghat Reserves. 1,822 such trees were cut out during the year under review. The trees are sold where they fall. These operations might usefully be extended, if the produce can be disposed of.

The bulk of the produce yielded by the Berar forests is removed by consumers and purchasers. The following is an estimate of the total quantity of produce removed during the year :—

Teak,	(cubic feet)	...	199,759
Timber of other kinds,	(„ „)	...	175,351
Firewood,	(„ „)	...	456,117
Bamboos,	(number)	...	3,138,938
Grass,	(tons)	...	12,759
Fruits,	(„)	...	584
Other produce,	(„)	...	390

Financial Results.

12. The financial results of the year's working are as follow :—

Class of Forests.	Receipts.	Charges.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
State Reserves	45,088	65,600	...	20,512
District „	13,205	25,024	...	11,819
District forests	2,49,924	65,915	1,84,009	...
Total in 1883-84	3,08,217	1,56,539	1,51,678	...
Do. 1882-83	2,87,043	1,50,032	1,37,011	...
Increase in 1883-84	21,174	6,507	14,667	...

The total financial results of the year are satisfactory.

The deficit of the State and District Reserves has been as follows during the last three years :—

				Rs.
In 1881-82	...	...	...	62,878
„ 1882-83	...	...	...	38,101
„ 1883-84	...	...	...	32,331

This steady decrease is also satisfactory. The system of working at present followed includes the closing of most of the reserves, so as to effect their re-stocking, while the people are supplied from the unreserved forests.

13. The revenue of the year was derived from the following sources :—

			Rs.
By the sale of timber	...	...	87,260
Do. do. firewood and charcoal		...	21,938
From confiscated drift and waif wood		...	7,700
By the sale of bamboos	...	...	31,964
From miscellaneous sources	...	...	22,620
TOTAL		...	1,71,482
By the sale of grass and by grazing fees		...	1,36,735
GRAND TOTAL		...	3,08,217

The statement contained in paragraph 9 of your orders on the Report, that four-fifths of the receipts are derived from the sale of grass and grazing dues, is apparently the result of an oversight, as these sources furnish only 44 per cent. or little more than two-fifths of the total revenue.

14. On the whole, the administration of the forests during the year under review seems to have been satisfactory, and His Excellency in Council notices that you commend the manner in which the Conservator of Forests has conducted the supervision of the Department.

No. 111 F.

COPY, with copy of the Report for 1883-84, forwarded to the Foreign Department for information.

D N M.—Home Department Press—No 32—11-2-85—215.

No 4195 of 1885.

FROM

LESLIE S. SAUNDERS, ESQ., C. S.,

Commissioner, Hyderabad Assigned Districts,

To

THE SECRETARY FOR BERAR TO THE RESIDENT

at Hyderabad.

AMRAOTI, *20th August* 1885.

SIR,

I have the honour to forward the Progress Report of Forest Administration in the Hyderabad Assigned Districts, for the year 1884-85, which reached me on the 9th instant.

Areas.

2. The areas under the control of the Forest Department have undergone the following changes:—

Class of forests.	Area in square miles.			
	At the commencement of the year.	Increase.	Decrease.	At the close of the year.
State Reserves	1,108	16	16	1,108
istrict do.	527	4	95	436
Unreserved Forests... ...	2,760	99	39	2,820
Total ..	4,395	119	150	4,364

The changes are mainly due to transfer of areas from District Reserves to the class of Unreserved Forests, and to reduction owing to classification and extension of cultivation.

Re-classification.

3 The re-classification scheme for the taluks of Akola, Buldana and Basim Districts not having been sanctioned as contravening the settlement agreement, no change has been made in the grazing tracts of these districts.

Survey.

4. The forest survey work was continued satisfactorily during the year under the superintendence of Mr. Reynolds, Officiating Superintendent of Forest Surveys.

General protection.

5. The number of cases of breaches of Forest rules has again this year decreased, and amounted to 308 in the year under review, against 381 noted during the previous year. The percentage of convictions shows a satisfactory increase during the year from 83 to 84-8.

Fire protection.

6. The following table exhibits the results of the year's fire protection in comparison with those of the previous two years:—

Years.	Area in square miles.			Proportion of failures to area attempted.
	Attempted.	Protected.	Failures.	
1882-83	1,034	973	61	6 per cent.
1883-84	1,048	972	76	7 ,,
1884-85	1,046	1,023	23	2 ,,
Increase or decrease 1884-85 ...	—2	+ 51	+53	5 ,,

The results are, on the whole, very favorable.

Reproduction of forests.

7. Natural reproduction has made successful progress, it is reported, in all fire protected areas, and the results of artificial reproduction are now exhibited as follows :—

	Area in acres.		
	At the commencement of the year.	Added.	At the close of the year.
Regular plantations ...	1,409	...	1,409
Other cultural operations...	1,251	879	2,130
Total ...	2,660	879	3,539

The Purna Valley Babul Reserves are said now to be well stocked.

Roads and buildings.

8. The outlay under communications and buildings during the year increased by Rs. 6,229, chiefly in roads, as shown below :—

	1883-84.	1884-85.
Roads and bridges ...	7,562	15,462
Buildings ...	2,173	597
Other Works ...	343	188
Total ...	10,078	16,247

The forest roads in the Melghat have been satisfactorily pushed on during the year, and are kept in good repair.

Demarcation and improvements.

9. The expenditure on demarcation and improvement of forests amounted to Rs. 8,598 or less than in the previous year by Rs. 7,548, chiefly under survey, demarcation, and protection from fire.

Financial results.

10. The financial results of the year under review, arranged according to the different classes of forests, are as follow :—

Class of forests.	Receipts.	Charges.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
State Reserves ...	47,271	63,793	...	16,522
District do. ...	55,596	26,934	28,662	...
Unreserved Forests ...	1,90,581	61,787	1,28,794	...
Total for 1884-85 ...	2,93,448	1,52,514	1,57,456	16,522
Total for 1883-84 ...	3,08,217	1,56,539	1,84,009	32,331
Increase or decrease in 1884-85.	—14,769	—4,025	—26,553	—15,809

The net surplus was less than in the previous year by Rs. 10,744, owing to receipts from the Unreserved Forests having fallen off from Rs. 2,49,924 to Rs. 1,90,581 in the year under review, the reasons for which are explained in paras. 40—48 of the Report.

The deficit of the State Reserves has again decreased this year, as will be seen from the following figures :—

In 1881-82 it was Rs.	41,498
„ 1882-83 „ „	20,719
„ 1883-84 „ „	20,512
„ 1884-85 „ „	16,522

While there is a surplus of Rs 28,662 in favour of the District Reserves, against a deficit of Rs. 11,819 in the previous year. In course of time no doubt the present deficit will also make way to a surplus in State Reserves.

Gonoral remarks.

11. Much attention is still required to be given to the steady reproduction of bamboos, which are in great demand throughout the Berars; with the opening out of roads and other communications the demand for them is greatly increasing, and it seems quite doubtful if the supply can keep pace with the demand.

The successful management of fo rests in the Melghat Division is in a great measure due to the exertion of Mr. B allantyne, Deputy Conservator of Forests, who has held charge there for a good number of years, and he has been for many years very ably assisted and supporte d by Colonel Mackenzie, the Deputy Commissioner of the Ellichpur District. To these officers I would suggest that the thanks of the Resident may be comm unicated.

I have the honour to be,

Sir,

Your most obedient Servant,

LESLIE S. SAUNDERS,

Commissioner,

Hyderabad Assigned Districts.

No. 254 of 1885.

From

Major G. J. van SOMEREN,

Conservator of Forests,

Hyderabad Assigned Districts,

To

The COMMISSIONER,

Hyderabad Assigned Districts,

Amraoti.

Chikalda, *the 17th July* 1885.

Sir,

I have the honour to forward the Report on Forest Administration in the Hyderabad Assigned Districts for the year 1884-85.

INTRODUCTORY.

Throughout the year the controlling staff was under sanctioned strength, the scheme for placing each of the six civil districts under the care of a separate Forest Officer was, therefore, left in abeyance and no change was made in the distribution of the Forest Divisions. The rules for connecting Forest Officers more closely with the civil administration were published on the 1st April 1884, but until January 1885 little effect was given to them. The rules were in January pressed on the notice of the Deputy Commissioners, and a fair beginning was made in bringing them into practice.

2. On the 15th January 1885 Mr. Drysdale went to England on furlough for two years, and was relieved of his duties as Conservator by Major van Someren. There were no other changes in the controlling staff.

CHAPTER I.—Area and Boundaries.

3. At Gahuli, in Basim, a new reserve, measuring 8,572 acres, was formed; 471 acres were added to Lonbehel, and 1,280 acres to Twisala in Wun. On the other hand, changes in Wun District, due to re-classification and to a small exchange in the Kelapur Reserve in Basim, reduced the area by 10,319 acres, thus increasing the total area of State Reserves by four acres only.

In the District Reserves about 85 square miles were excluded and 4 added in Wun District, in accordance with Mr. Bagshawe's classification, which was sanctioned; and about 10 square miles were excluded in Basim District for cultivation and use of villagers.

The unreserved forests were increased by 60 square miles in all. In Wun District some 79 square miles were added by transfer from District Reserves and land thrown up by cultivators. In Basim some 13 square miles were transferred to the Gahuli Reserve, and 2 square miles to cultivators. Other changes, chiefly interdivisional, are detailed in form No. 49.

Description of forest.	Area in square miles.				Percentage of forest area to area of province.
	On 1st April 1884.	Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1885.	
State reserves	1,108	16	16	1,108	6·8
District reserves	527	4	95	436	2·7
Unreserved forests	2,760	99	39	2,820	17·5
Total ...	4,395	119	150	4,364	27·0

4. In January 1885 tentative sanction was accorded to the re-classification of the district forests in the Darwha, Kelapur and Wun Taluks of the Wun

District. The whole of the Wun District, the whole of the Amraoti District, and two-thirds, or the two plains taluks of Ellichpur District, are now re-classified and worked on the new system.

5. In the Melghat Reserves the boundary-marks of Bairagarh were kept in good order. In some spots they are too far apart, and this point will be attended to and intermediate pillars put down. The Gugamal pillars will, as they require repairs, be altered to the pattern in use in Bairagarh, which is the better of the two. All boundary lines were kept well cleared. In the South Berar Division, the boundary lines and marks were well maintained. The boundary lines round the new reserve of Gahuli were cleared, and iron pillars ordered, which will be put up. In Wun the lines round the new additions remained to be cleared. In Amraoti Division the boundary lines round the State Reserves and those setting off the rumnahs, were cleared. The 82 new pillars referred to in the Report for 1883-84 were set up at a cost of Rs. 190.

6. Throughout the province many of the marks set up by the Revenue Survey Department, and which in many cases mark the boundaries of the State Reserves, have fallen into disrepair, and will have to be attended to as early as practicable. No provision for their repair was made when the budget for 1885-86 was drawn up.

CHAPTER II.—Surveys, Working Plans and Annual Plans of Operations.

7. The following summary of the work done by his department has been furnished by the Officiating Superintendent, Forest Surveys:—

"Survey operations during the field season of 1884-85 were carried on in South Berar as well as in the Melghat Taluk of the Ellichpur District.

"The survey parties took the field in November, and out of-door work was continued until the middle of June, when the rains set in and obliged the field parties to return to recess quarters.

"In South Berar a detailed topographical survey was completed, on the scale of 4 inches = 1 mile, of the Geru Matergaon Reserve, comprising an area of 77·12 square miles. In the Melghat 727 square miles were triangulated, 168 square miles were traversed, and a detailed topographical survey of 298·61 square miles, on the scales of 4 and 2 inches = 1 mile, was completed in the south-eastern corner of the taluk.

"An index map is attached which illustrates the progress of the survey work in the Melghat.

"The total area topographically surveyed in detail (excluding the areas triangulated and traversed) was 375·73 square miles, which is made up as follows:—

"South Berar on the scale of 4 in. = 1 mile	77·12	square miles,	
Melghat on ... ... 4 in. = 1 mile	91·18	"	"
Do. .. . . 2 in. = 1 mile	207·43	"	"
	375·73		

"Two scales have been adopted for the survey of the Melghat Taluk. The black soil villages are surveyed on the scale of 4 inches = 1 mile, whilst the forest reserves and red soil tracts are being surveyed on the scale of 2 inches = 1 mile. The larger scale surveying is of the nature of a cadastral survey, and embraces the measurements of all fiscal boundaries as well as the boundaries of every individual holding (field) in each village.

"A village register is also kept in which is recorded particulars regarding each holding, and which will be useful hereafter to the revenue authorities for assessment purposes.

"On the topographical maps of both the 4 and 2-inch scales levelled contours have been shown at vertical intervals of 300 feet, with 15 intermediate sketched contour lines on the 4-inch sheets, and on the 2-inch maps 10 intermediate sketched contours are shown, so that every contour line on the 4-inch maps represents a vertical distance of 20 feet, whilst contour lines on the 2-inch scale represent

vertical distances of 30 feet. This information should make the maps most useful, not only for forest purposes, but also for engineering and other purposes. The tangent scale clinometer was the instrument used for laying down the levelled contour lines, and the present Berar maps are the first that the Forest Survey Department has turned out in this style.

"For the field season of 1885-86 an ample area has been triangulated and traversed in advance, which will allow of the topographical parties taking the field early in November. In the area triangulated (737 square miles) 670 points have been fixed by three or more rays, and data are available for fixing the geographical position and for computing the heights above sea level of all these points. In the area traversed (168 square miles) 128 linear miles of traversing have been run along boundaries, roads, and main streams with 953 traverse stations.

"The instrument used for angular measurements in the traversing was the circular card protractor and 6-inch magnetic needle mounted on a plane table; but it was found in some parts of the Melghat that local attraction affected the magnetic needle to such an extent, that it was not possible to obtain reliable results from it, and hence some of the traversing that was done the previous year had to be rejected.

"During the recess months (June to October) as many sub-surveyors as cannot be usefully employed in the office are permitted to go to their houses on half pay; the rest of the establishment is employed upon computing the season's triangulation, traversing, &c., deducing areas, plotting and drawing fair maps for publication, and on sundry other office duties.

"The traverse indicator, which was designed by me last year, has been introduced into the working of the Berar surveys as a substitute for Shortride's traverse table, and it has in every way proved a success. It is a diagram that can be readily used by anybody, and from which the meridian and perpendicular distances on traverse lines can be taken out by inspection instead of using a large book of traverse tables to obtain the results. The saving in time by using the 'traverse indicator' is very considerable, where the traverse computations are at all heavy.

"Sheets Nos. 15, 16, 19 and 20 (*vide* index maps) as well as the map of the Chikalda plateau (extending from Postalei to Mota) and several sheets of congregated village maps, on the 4-inch scale, will possibly be ready for the press by the close of the recess season. The drawing of several of these maps is already in progress.

"The demarcation of the Melghat village boundaries and of fields in the black soil villages is carried on under the supervision of the Deputy Commissioner of Ellichpur, and the work has kept pace with the survey, but it would be an advantage if, during the present recess season, the demarcation were pushed on, so as to be well ahead of the survey at the beginning of next field season.

"Both European and Native Surveyors suffered a good deal from fever during November and December, so much so that at one time the field work was almost at a standstill, but matters mended in January, and a satisfactory season's work was secured.

"I am much indebted to Colonel Mackenzie, the Deputy Commissioner of Ellichpur, for the ready assistance he has at all times afforded me whilst working in his district, and for the prompt manner in which he disposes of boundary questions that are likely to delay the survey work. My thanks are also due to Mr. Ballantyne, the Forest Officer of the Melghat, for the assistance that he has rendered to the several survey parties that have been working in and about the Forest Reserves."

8. It is probable that the Geru Matergaon Reserve will prove to have a somewhat larger area than that assigned to it by the old measurements of the Revenue Survey Officers.

9. There are no working plans, in the proper sense attached to those words, for the forests in Berar, nor are they yet needed. Annual plans of operations suffice for the present, and have been drawn up for the work to be carried out in the Melghat forests and in the Amraoti District for the year 1885-86. The reserves in Wun and South Berar require absolute rest to recover themselves, but the sowing of tree and bamboo seeds in all likely spots in all the reserves within the hills and plains, and in several of the woods, or babul buns, is a highly important measure of improvement which should be insisted on for years to come. In the Melghat and in Amraoti District the plans of operations have been fairly carried out.

CHAPTER III.—Protection and Improvement.

(1.)—*Establishment.*

10. The controlling staff throughout the year was under strength, and consisted of:—

1 Conservator,
3 Officiating Deputy Conservators, and
1 Sub-Assistant Conservator.

Proposals for the revision of the establishment of rangers, foresters and guards were submitted during the year, but were re-submitted in a slightly altered form after the 1st April 1885. Orders on them are not yet received.

The subordinate establishment at the close of 1884-85 was composed of 7 rangers, 1 supernumerary ranger, 68 foresters, and 116 forest guards, some of the places, however, being vacant.

11. Proposals have lately (April 1885) been submitted which, if sanctioned, will allow of a maximum of four foresters being kept yearly at the forest school at Dehra Dun, until a strong reserve has been formed of passed men fitted for promotion to the post of ranger. Such men are greatly needed.

(2.)—*Legislation and Rules*

12. Remained unaltered during the year.

(3.)—*Breaches of Forest Rules.*

13. Form No. 52 gives full details, which are summarized in the following table:—

Divisions	Prosecutions.				Convictions.	Acquittals.	Cases pending at close of 1884-85.
	Pending from 1883-84.	New of 1884-85.	Total for trial.	Concluded in 1884-85.			
Ellichpur District, (Melghat)	...	157	157	157	134	23	...
South Berar Division	...	79	79	78	74	4	1
Amraoti Division ...	...	46	46	45	34	11	1
Wun Division ...	3	26	29	29	19	10	...
Total ..	3	308	311	309	261	48	2

The percentage of convictions to prosecutions, 84·8, is good, and that only two cases are reported as pending at the close of the year is satisfactory. Ninety cases arose in the reserves (of which 35 were of unauthorized grazing, and 33 of illegal fellings), the remaining 218 arose in the district forests, unreserved forests, and nakas, or places where forest dues are collected at the foot of the Melghat hills.

(4.)—*Forest Fires.*

14. The work done in protecting the forests from fire during the hot season of 1885, say from middle of February to 30th June 1885, is given in the

following table, which compares the results of 1884 and of 1885 in the same form as that entered in the Report for 1883-84 :—

Divisions.	Years.	Actually protected.	Failures.	Cost.
				Rs.
Direction	1884	..	...	33
	1885	...		
Melghat	1884	389,536	113	1,842
	1885	386,989	260	1,802
Amraoti ...	1884	13,071	...	537
	1885	13,071	...	231
South Berar	1884	105,802	3,640	1,241
	1885	115,317	3,632	919
Wun	1884	113,913	14,658	2,823
	1885	139,368	10,788	2,107
Total ...	1884	622,322	48,411	6,476
	1885	654,745	14,680	5,059

The area actually protected was greater by 32,423 acres than in 1884, the Wun Division having done far better during 1885 than in 1884, the failures fell by 33,731 acres, and the total cost in the whole province was Rs. 1,417 less than in 1884.

The cost per protected acre comes to less than 1½ pies, or, say, five rupees per square mile.

15. As full details are given in form No. 51 for each reserve of each division, it is not necessary to repeat them here. It will suffice to mention shortly what is wanted to elucidate figured statement No. 51.

In the Melghat Division 113 acres more were protected in the Raipur block, but 2,400 acres, or the whole of the Chikalda Reserve, were not only not protected but were deliberately burnt by the Forest Officer in February 1885. During 1884 the Sanitary Commissioner having held that the presence of so much grass in and around the cantonment of Chikalda, which is inside the reserve, was unhealthy, it was decided to burn it off, and this was done on the receipt of orders from the Commissioner. At Butida, in the Bairagarh Reserve, 180 acres were burnt. This fire was due to the carelessness of two forest guards, who left a stump smouldering at night after burning off the firepath. The fire, which broke out next morning, was seen by the villagers of Buttrum, who turned out at once and extinguished it before any forest official arrived. The villagers were rewarded, and six forest officials, who were all blameworthy in various ways, were punished. In the Gugamal Reserve two drunken Gonds burnt 80 acres on their way home from a bazaar, and were fined by the magistrate.

16. There were no fires in the Amraoti District, and the expenditure was very low. Instead of burning the grass off the firepaths cattle were allowed, under surveillance, to graze it off, which they did effectually.

17. In the South Berar Division there were two fires in the Geru Matergaon Reserve. One was due to disobedience of orders on the part of a guard who, thinking that a firepath was not sufficiently cleared, took upon himself to fire it in the morning. A breeze sprung up, and 1,200 acres were burnt. The second fire was caused by lightning, which was seen to ignite the grass. Fourteen acres were burnt, and the fire was quenched by the storm that followed shortly afterwards.

In Amdari Reserve 16 acres were burnt, cause unknown.

In Ghatbori Reserve 70 acres were burnt on the 1st March. The Conservator and Deputy Conservator were in a village two miles off, and the fire was got under. On searching the banks of a stream on which the fire commenced signs were found of some traveller having cooked his food there. He had fled and was not discovered. A second fire was due to negligence on the part of the ranger, who did not make sure of all sparks being quenched after burning off a firepath, and 600 acres were burnt. Three other fires burning respectively 1,100 acres, 600 acres, and 32 acres, occurred later in the season. Their origin could not be traced. Villagers in the neighbourhood always turned out willingly to help in extinguish-

ing fires. The ranger has been transferred to a smaller charge. In the South Berar Division the total area protected was increased in 1885 by 9,515 acres, the failures being eight acres less than in 1884; a result very creditable to Mr. Prevost.

18. In Wun, unfortunately, 10,788 acres were burnt, but in spite of that the results of 1885 are greatly in advance of those of 1884, for the protected area was greater by some 25,500 acres, and the failures fell from 44,658 to 10,788 acres.

There were in Wun, in all, thirty fires, of which nine were due to want of care in burning fire-paths, one to delay in burning off an interior line, three to passing travellers and shikaries, and for seventeen no reason could be assigned.

19. It is worth noting here that Mr. Ballantyne has very lately reported that the Sipna river in the Bairagarh Reserve, which used formerly to come down in sudden floods after every heavy fall of rain does not do so now, but rises slowly and steadily. This can be due to no other cause than the great natural reproduction and growth of tree and other vegetation throughout the reserve, and especially all along the ravines and water-courses so numerous in the Melghat forests. This reproduction, again, is due in very great part, indeed almost entirely, to the long immunity from fire which the Bairagarh Reserve has enjoyed under Mr. Ballantyne's careful management.

20. The Government of India in its Home Department Circular No. 4-F. of the 14th April last, directed that "an estimate of the extent of the forest areas which, as a rule, escaped forest fires without the adoption of special measures for their protection," should be included in the annual report for 1884-85.

The figures given below are put forward with diffidence. There has been very little time since the actual receipt of the circular to ascertain facts. In deciding on the figures to be adopted as approximating to the facts, the following considerations have been attended to. The area of unreserved forests is altogether discarded. On the hills, parts of these forests may escape being burnt one year but not the next; as a rule they are all burnt.

There remain the woods (babul buns), rumnas (grass lands) and the grazing lands. All these belong to Government and carry forest; and when the new Berar Forest Law comes into force will rank as such, under whatever conditions they may be worked.

21. Thus, although the new District Forest scheme is not sanctioned for the Buldana, Basim, or Akola Districts, the woods, rumnas and grazing lands set apart by Mr. Bagshawe and by Mr. Prevost are, for the purposes of this estimate, assumed to be "forest areas" in the meaning attached to those words by the Government of India.

The woods (14,532 acres) have, as a rule, no grass on them to be burnt. The better the wood, the poorer the grazing. Fires in these woods are very rare, and so the whole area of woods is entered.

Of rumnas (41,184 acres) some, it is known, have been burnt, and it is perhaps well, therefore, to enter but one-half of their total area as having escaped during 1884-85.

The grazing lands cover a large area, 1,335,169 acres, and are as a rule so well cropped down by cattle that fire finds little on which to feed. No fires occurred in the large blocks of Amraoti and Karanja. It is, perhaps, fair to assume that two-thirds of these have escaped damage by fire during 1884-85. The figures for the three classes of forest land will then be in acres :—

Woods	14,532
Rumnas	20,592
Grazing lands	890,110
	925,234

If the meaning of the Government has been correctly apprehended, the rough estimate now offered will form a basis on which to work, corrections being applied to it as better information regarding the actual figures becomes available.

(5.)—*Grazing and Fencing.*

22. Grazing was allowed in the Melghat State Reserves, in the unreserved forests, and in the Beiram grazing tract under the same rules as in 1883-84.

In Amraoti District cattle were allowed to enter upon the grazing lands set apart under the re-classification scheme. Cattle were also grazed in the district forests elsewhere under a general grazing tax, and a further source of supply was afforded by allowing cattle to graze under certain limits in the State Forests in South Berar and Wun Districts.

23. Full comparative details are given in Appendix A., which is summarized here:—

Divisions.	Camels.	Buffaloes.	Cows and bullocks.	Sheep and goats.	Total.
Melghat Division ...	175	17,613	97,826	50,607	166,221
Amraoti do. ...	4	26,757	114,557	63,921	205,239
South Berar do. ..	...	1,611	19,325	40	20,976
Wun do. ...	...	37,512	297,792	52,442	387,746
Total ...	179	83,493	529,500	167,010	780,182

In the South Berar Division grazing lands are farmed to contractors by the Civil officers, and no reference is made in this table to the cattle grazed in that way.

24. During the year it was decided to allow light grazing in the State Reserves, and the system was introduced in South Berar and Wun Divisions. Cows and bullocks alone were permitted to enter the forests, from the middle of June to the end of October, at a fixed rate of four annas a head, the number being limited to one head for every 2½ acres. The result of a careful inspection, made by the Conservator in February and March 1885, over a large portion of the South Berar Division, showed that the forests were on the whole benefited, as the removal of the heavy grass had allowed seedlings to spring up freely. Kept within due limits, and care being taken that the cattle are not allowed to stay too long in one spot, the system is one that presents distinct advantages. It must, however, not be allowed to grow into a right of user, and full power must always be left to the Conservator to stop the practice in any part of the forests when he deems it right to do so.

25. No fencing was done anywhere.

26. The Executive Engineer, East Berar Division, has kindly furnished the following statement showing the progress made in works for storing water for cattle:—

Name of tanks.	Cost. Rs.	Remarks.
Hirganan in Amraoti hills	18,524 ...	Completed.
Pohora in Amraoti hills	28,261 ...	In progress; will be completed in March 1886.
Damangaon in Ellichpur District ...	13,490 ...	Completed.
Sonapur in do. ...	1,264 ...	Do.
Chichkhera in do. ...	1,547 ...	Do.
Boorudghat in do. ...	2,265 ...	Do.
Mata in do. ...	1,025 ...	Do.
Selona in do. ...	1,905 ...	Do.
Bori in do. ...	1,293 ...	Do.
Gatang in do. ...	13,904 ...	Nearly finished.
Baramtanu do. ...	1,234 ...	In progress; will be finished in December 1885.
Jelghat in do. ...	1,441 ...	
Tekra in do. ...	1,217 ...	Do. do. do.
Tatona in do. ..	1,080 ...	Not yet commenced; will be finished by March 1886.
Pastula in do.	...	

6.—*Natural Re-production.*

27. Natural re-production in the forests of the South Berar Division, where fire conservancy has now for six years been successfully carried on, is very good. The tree growth which was on the ground before that time, in the shape of bushes and constantly burnt over seedlings, has sprung up, and especially along ravines the growth has been most encouraging. In places where seed bearing trees were standing seed fell and germinated, but the rigid exclusion of cattle, combined with successful fire conservancy, produced so heavy a crop of

grass that tree growth was greatly checked. The introduction of light grazing has partly removed this obstruction. But over large portions of the reserves on the hills running from Buldana to near Basim there is a great dearth of matured seed bearing trees of any kind, and especially of good woods. This want must be supplied by steady perseverance in sowing tree and bamboo seeds systematically year after year. Here and there large timber trees may be expected to grow, as in Kinwat and Penganga Forests, and in parts of Wun, but speaking broadly, the Melghat State Reserves are the only forests in Berar that will ever yield timber. Long continued protection from fire, and persistent sowings will in time work wonders; but it is not probable that these lands in South Berar will ever grow timber except in deep soil in the ravines. But as fuel and fodder reserves they are of great economic value already, and with care will become still more valuable in the future.

28. In the Bairagarh Reserve the natural re-production is remarkable. Protected for seventeen years from fire and carefully guarded from theft this result might have been expected; and fortunately teak, tewas, haldu, sadra, or saj, all useful trees, predominate. In many of the large ravines the preponderance of well-grown teak is striking, and along the northern and north-eastern borders of the reserve the stock of young teak is very large. But towards the eastern parts of the reserve, and chiefly in the Katkoomb pargana, the forest changes, and the hirra (terminalia chebula) is common. This myrobalan being now very valuable (selling this year in the forest at a top price of 10 Rs. a candy) every single fruit is gathered up. Should the demand be maintained at anything like the present figure the supply will gradually disappear, for the number of hirra seedlings on the ground is practically nil. This was pointed out by the Conservator during a tour he made lately, and he afterwards found that the Deputy Commissioner of the Ellichpur District had noticed the same thing. Seed for sowing will be collected next year.

29. During the year 688 teak trees and 74 trees of other kinds, all badly grown, were cut over. Teak trees that were cut over in the Sipna valley between the years 1871 and 1875 have now produced long straight poles of diameter sufficient to furnish good rafters, and having been carefully cut over close to the ground have established themselves on their own roots. Mr. Ballantyne was the first Forest Officer in India who saw the advantages of this system of felling teak, and by keeping to it steadily he has in no small degree improved the growing stock now on the ground.

30. The re-production in the Gugamal Reserve is bad. The open block system, which was practised here for several years, had the effect of denuding the forest of almost all seed bearing teak trees. The forest requires to be sown up diligently.

31. The reproduction in the Chirodi Forest, part of the Amraoti hills reserve, is fair where the soil is good, and along water-courses.

(7.)—*Artificial Re-production.*

32. Of plantation work, properly so called, there was practically none. At Karanja there is a small nursery, and 4,019 mango trees were put out in the Karanja tank numbers, but only 753 of these survived. The formation of regular plantations is a work which demands much careful and skilful supervision, good soil, and the command of sufficient labour at a time when an agricultural community is busy in its own fields. Throughout Berar the better plan is to sow seed broadcast, and in prepared spots in all blank places in the reserves, and in the babul buns held by the Department. Such may, perhaps, be more properly called

(8.)—*Cultural Operations.*

33. It is reported that in Amraoti 334 acres were sown up, partly broadcast, and partly in ploughed lines. Babul and tewas seeds were put down; the babul succeeded, the tewas failed. But this work was carried out in the rumna which was specially set aside for the purpose of supplying Amraoti town and many neighbouring villages with fodder and thatching grass. As trees will greatly diminish, if not altogether kill, grass under them, this sowing in the rumnas has been stopped. There is ample room in the reserves and babul buns to take all the seed the Department can collect for years to come.

34. The broadcast sowings in the Purna Babul Reserves mentioned in the Report for 1883-84 have succeeded well, and the reserves are now stocked.

9.—*Cutting of Creepers.*

35. No work done.

10.—*Communications and Buildings.*

36. In the Melghat a very useful road from Kolkaz to Rangrao Chorni, twelve miles in length, was made at a cost of Rs. 3,705. Nine miles of the Sembada-Chikalda road were constructed at a cost of Rs. 10,229. A good deal of rock cutting was required on parts of it.

Thirty-seven miles of the Biba-Sembadoh road; eight miles of the Makla-Sembadoh road; and thirty miles of the Bandum-Chikalda road were repaired, at a total cost of Rs. 1,163 for the forty-five miles. In the Melghat Unreserved Forests Rs. 48 were spent on petty repairs to various roads.

The Superintending Engineer, Hyderabad, finally settled on the line of the future Wagdeo-Dakna road in Gugamal, and it is now being surveyed. The Jiri-Kalamkar road is still in abeyance.

37. In South Berar Division Rs. 181 were spent in small repairs to roads; and Rs. 72 in Amraoti Division.

38. Repairs to 32 tannahs and nakas, rest-houses, and tool-sheds, and fencing 18 compounds round tannahs and nakas in the Melghat, cost Rs. 418, and Rs. 135 were spent on repairs of Peach Grove at Chikalda, now lent to the Forest Survey Department.

In South Berar three tannahs were built for Rs. 112, and Rs. 53 spent in petty repairs to 14 tannahs, and Rs. 9 in Wun in repairs.

CHAPTER IV.—Yield and Working.

(1).—*Departmental Operations.*

39. Departmental operations are carried on in the Melghat Division alone:

Here 764 trees were cut over at a cost of Rs. 45, and sold for Rs. 1,093 on the spot.

40. The following table shows the quantities of forest produce removed from the Melghat Division on which dues were paid:—

Produce.		Bairagarh Reserve.	Gugamal Reserve.	Unreserved Forests.
Teak	1883-84 ..	C. ft. 21,947	.	177,812
	1884-85 ...	„ 8,952		155,410
Timber of other kinds	1883-84 ..	„ 4,307	...	161,547
	1884-85 ...	„ 855	...	151,565
Firewood ..	1883-84 ...	„ 28	...	295,110
	1884-85 .	„ 14	...	254,779
Bamboos	1883-84 ...	No. 913,374	538,120	1,604,894
	1884-85	„ 1,127,122	734,845	1,305,059
Grass	1883-84 ..	lbs. 1,680	...	4,743,480
	1884-85 ...	„ ...	...	5,623,905
Lac	1883-84 ..	„ 3,328	.	19,419
	1884-85 .	„ 1,144	...	29,369
Teak leaves... ...	1883-84 ...	„ ...	...	667,732
	1884-85 ...	„ 104	...	688,168
Fruits	1883-84	„ 41,312	...	1,266,543
	1884-85 ...	„ 260,127	...	1,655,031
Gum	1883-84 ...	„ ..	...	3,826
	1884-85 ...	„ ...	...	3,716
Miscellaneous ...	1883-84 ...	„ 52	...	17,346
	1884-85 ...	„ ...	...	24,131

41. The decrease in quantities of teak and timber of other kinds removed

was, from the reserved forests, 16,447 cubic feet, and from the unreserved forests 32,384 cubic feet, or 48,831 in all. For this three reasons are assigned.

The year 1885 is a Sinhast year, during which no new buildings are put up by Hindus. The cotton crop was much below the average, and the ryots had less money to spend on wood. Narain Dhondu, a capital officer, who had the overlooking of the collections of dues at the nakas, died in December 1884, and the men who succeeded him were twice changed. The dues fell off at once. This is a most important post, and unless the check is both careful and honest the naka karkuns have great opportunities for committing frauds.

42. Firewood dues were collected on 40,331 pounds weight less. As head loads are free, much firewood and grass are carried through the nakas as head loads and then piled on carts. This is an evasion of the privilege, meant for poor people only, and will be looked into.

43. From the reserved forests there were 410,473 more bamboos removed. This is owing apparently to the better kind of bamboos, to be had in them, and to the improved means of communication. From the unreserved forests 299,835 less were taken.

44. Owing to the fine crop of hirra (myrobalans) and mohwa flowers the quantity of fruits and flowers removed rose by 218,815 pounds from the reserved forests and by 388,488 from the unreserved forests

45. Nearly 900,000 lbs. more of grass were exported Other items call for no particular explanation.

46 The following table shows the removal of taxed produce in Amraoti Division —

Timber	1883-84	C. ft	1,139
	1884-85	"	412
Firewood	1883-84	"	141,228
	1884-85	"	84,645
Grass	1883-84	lbs.	5,982,322
	1884-85	"	8,078,508
Miscellaneous	1883-84	"	162,913
	1884-85	"	177,851

The partial failure in the crop of jowari raised the demand for grass, which rose by (2,096,186) more than two millions of pounds weight. The supply was good, and is due to successful fire conservancy and careful watching to prevent theft.

47. Comparative statement of the produce of the South Berar Division :—

Timber	1883-84	C. ft.	8,246
	1884-85	"	8,638
Firewood	1883-84	"	19,387
	1884-85	"	12,998
Grass	1883-84	lbs.	10,030,143
	1884-85	"	5,330,509

Here, too, there was a falling-off in firewood, and in grass a great fall of $4\frac{3}{4}$ millions of pounds. But this was counterbalanced by the cattle being allowed to graze in the reserves as already shown.

48. Comparative statement of the produce of the Wun Division :—

Timber	1883-84	C. ft.	112
	1884-85	"	1,970
Firewood	1883-84	"	364
	1884-85	"	154
Grass	1883-84	lbs.	78,23,340
	1884-85	"	39,00,855
Bamboos	1883-84	Nos.	82,550
	1884-85	"	81,600

Here again the quantity of grass removed was less by nearly four millions of pounds, counterbalanced by increased grazing.

49. Comparative summary for the province of produce removed from the forests, shown in cubic feet, numbers and tons :—

		1883-84.	1884-85.
Teak	C. ft.	199,759	164,362
Other timber	„	175,351	163,443
Firewood	„	456,117	352,590
Bamboos	Nos.	3,138,938	3,248,626
Grass	Tons.	12,759	10,238
Lac	„	10	13
Teak leaves	„	298	307
Fruits	„	584	855
Gum	„	1½	1½
Miscellaneous	„	80	91

CHAPTER V.—Financial Results.

50. The financial results are shown in Forms Nos. 53 to 57, based on the Comptroller's *annual summary*.

51. The gross revenue was got in from the following sources :—

	Rs.
Timber	75,521
Firewood and charcoal	15,984
Bamboos	32,769
Grazing and fodder grass	1,47,571
Minor produce	18,544
Confiscated, drift and waif wood	1,299
All other sources	1,760
Total	2,93,448

Or Rs. 14,769 less than in 1883-84.

The explanations given in paragraphs 40 to 48 showed why there was a smaller demand in 1884-85 than in 1883-84 for timber, firewood and charcoal. It follows that the revenue derived from those articles was less, the less values being respectively Rs. 11,739 and Rs. 5,954. Under *confiscated, drift and waif wood* Rs. 6,400 less were got in, but that is an item dependent on circumstances not directly under the control of the Department.

52. The expenditure was :—

	Rs.
A. Conservation and working	48,684
B. Establishments, &c.	1,03,830
Total	1,52,514

This was less than the sum spent in 1883-84 by Rs 4,025. Taking up only the more important differences there was a less expenditure

			Rs
Under A.	II.	Timber	441
Do.	VII. b.	Buildings	1,575
Do.	VIII. a.	Demarcation	1,513
Do.	VIII. c.	Surveys	5,526
Do.	VIII. e.	Protection from fire	1,356
Do.	IX. a.	Refunds	1,771
Do.	IX. c.	Other charges	532
Under B.		All heads	400

While more was spent under—

A.	VI. c.	Plant and Tools	475
„	VII. a.	Roads and bridges	7,899
„	VIII. b.	Compensation for land and rights	1,057

53. The revenue and expenditure of the different classes of forests were:—

Class of Forest.	Revenue.		Expenditure.		Surplus.		Deficit.	
	1883-84	1884-85.	1883-84.	1884-85	1883-84.	1884-85.	1883-84.	1884-85.
	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.
State Reserves, ...	45,088	47,271	65,600	65,793	...	...	20,512	16,522
District do. ...	13,205	55,596	25,024	26,934	...	28,662	11,819	...
Unreserved forests	2,49,924	1,90,581	65,915	61,787	1,84,009	1,28,794	...	...
Total ...	3,08,217	2,93,448	1,56,539	1,52,514	1,84,009	1,57,456	32,331	16,522
				Deduct deficit ...	32,331	16,522		
				Net surplus .	1,51,678	1,40,934		

The surplus being Rs. 10,744 less than in 1883-84.

54. The sum collected by Forest Officers was... Rs. 1,49,595
And by District Officers ... ... ,, 1,43,853
Total Rs. 2,93,448

55. The following comparative statement shows the financial results by Forest Divisions:—

		Revenue.	Expenditure.	Surplus.	Deficit.
		Rs.	Rs.	Rs.	Rs.
Direction Division.	Direction Office ..	4	23,136	...	23,132
	District Reserved and Unreserved Forests.	38,917	6,545	32,372	...
		38,921	29,681	32,372	23,132
Amraoti Division.	Divisional Office ...	78	4,632	...	4,554
	Amraoti Hills Reserves.	11,840	2,392	9,448	...
	District Reserved Forests.	51,711	3,896	47,815	...
		63,629	10,920	57,263	4,554
Melghat Division..	Divisional Office ...	474	14,683	..	14,209
	State Reserves ...	22,021	24,941	...	2,920
	Unreserved Forests ...	1,01,938	27,431	74,507	...
	District Reserved Forests	2,177	520	1,657	...
		1,26,610	67,575	76,164	17,129
South Berar Division.	Divisional Office ...	20	11,310	...	11,290
	State Reserves ...	7,642	6,968	674	...
	District Reserved and Unreserved Forests.	18,770	1,283	17,487	...
		26,432	19,561	18,161	11,290
Wun Division ...	Divisional Office ...	2	11,234	...	11,232
	State Reserves ...	5,576	7,827	...	2,251
	District Reserved and Unreserved Forests.	32,278	5,716	26,562	...
		37,856	24,777	26,562	13,483
	Total ...	2,93,448	1,52,514	2,10,522	69,588
			Deduct deficit ...	69,588	
			Net surplus ...	1,40,934	

56. The receipts and charges of the year exhibited under main budget-heads for 1884-85 are:—

Heads.	Receipts.		Charges.	
		Rs.		Rs.
I. Departmental timber operations.	I.	...	I	...
II. Other revenue ...	II., III., and V.	2,93,448	II. III. V. IX. 75 o/o VI. and B.	1,00,756
III. Formation, protection, and improvement of forests.	...	...	VII. VIII. 25 o/o VI. and B.	51,758
	Total ...	2,93,448	Total ...	1,52,514

57. Several tabular statements which appeared in the body of the report for 1883-84 have been omitted in this report. It was not thought necessary to show them in an administrative report, where they are not really needed. The whole of the information has, however, been worked out and recorded in the Conservator's office, where it is very useful. It is hoped that what has been now printed will suffice to enable the Government to see what has been actually done and to pass its orders thereon.

CHAPTER VI.—General Remarks.

58. The Resident having seen one of the district maps in course of preparation by the Superintendent, Forest Surveys, referred to in paragraph 61 of the Report for 1883-84, thought that it might be made to afford more general information without rendering it expensive. The matter has been taken up, and all Deputy Commissioners having been consulted, a specimen map is now being prepared.

59. Since the close of 1884-85 the new draft Forest Law for Berar has been received, and will shortly be sanctioned by the Viceroy. The Resident has also decided that the District Forest scheme shall not be introduced into the Basim and Buldana Districts. The Government of India, in the Department of Agriculture and Commerce, has also urged the necessity for setting aside sufficient fuel and fodder reserves. These three matters taken together will cause very important alterations in the forest rules, working, and management, and very probably in the forest areas also. They all fall to be taken up during 1885-86.

60. The registers of rain-fall are given in Appendix B. The usual abstract is here given:—

Station.	Year.	Rainfall.		No. of rainy days.
		Inches.	Cents.	
Chikalda	1883-84	88	15	113
	1884-85	75	4	
Bairagarh Reserve—				
Makla	1883-84	86	91	113
	1884-85	77	46	116
Raipur	1883-84	68	49	92
	1884-85	69	98	106
Pili	1883-84	77	41	113
	1884-85	69	91	108
Patia	1883-84	60	56	77
	1884-85	50	10	76
Hatru	1883-84	73	62	88
	1884-85	72	...	96
Geru Matergaon Reserve—Warwand	1883-84	61		75
	1884-85	36	80	60
Ghat Bori Reserve—Iswer	1883-84	67	70	78
	1884-85	39	27	64
Penganga Reserve—Narwandi Khord ...	1883-84	46	79	75
	1884-85	43	36	72
Kinwat Reserve—Sondabi	1883-84	55	6	63
	1884-85	61	39	62

61. The working of the Melghat Forests was very successful under Mr. Ballantyne's excellent control, and his good management of the Kurkus and Gonds living in the forests. Mr. Prevost's work in South Berar was also good. The Conservator begs to thank Lieutenant-Colonel Mackenzie, the Deputy Commissioner, Ellichpur, for the steady interest he takes in all forest matters, and for the cheerful assistance he at all times gives to the department in the Melghat.

G. J. VAN SOMEREN, MAJOR,

Conservator of Forests,

Hyderabad Assigned Districts.

APPENDICES.

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FORESTS.

APPENDIX A.—*Cattle grazed on payment in the various Forests (para. 23).*

Divisions.	Districts, &c.	Year.	Camels.	Buffaloes.	Cows and bullocks.	Sheep and goats.	Total.
Melghat Division.	Melghat, Ellichpur, and Betul, Central Provinces	1883-84	6	6,173	22,282	4,673	33,134
		1884-85	32	6,331	23,900	5,461	35,724
	Daryapur and Ellichpur Taluks of Ellichpur	1883-84	116	6,317	41,043	39,987	87,463
		1884-85	112	7,240	40,110	37,633	85,095
	Akola	1883-84	5	3,943	34,133	6,867	44,948
		1884-85	31	4,042	33,816	7,513	45,402
	Total ...	1883-84	127	16,433	97,458	51,527	165,545
		1884-85	175	17,613	97,826	50,607	166,221
Amraoti Divn.	Amraoti Hills	1883-84	...	5,891	26,289	14,878	47,058
		1884-85	...	928	5,164	8,559	14,651
	Amraoti District Forests ...	1884-85	4	25,829	109,393	55,362	190,588
South Berar Division.	State Forests in Basim, Akola, and Buldana	1884-85	...	1,382	15,555	...	16,937
	Basim District Forests... ...	1884-85	...	229	3,770	40	4,039
		...	...	1,611	19,325	40	20,976
Wun Division.	State Forests	1884-85		357	7,729	...	8,086
	District Forests	1884-85	...	37,155	290,063	52,442	379,660
		...	...	37,512	297,792	52,442	287,746
	Total ...	1883-84	127	22,324	123,747	66,405	212,603
		1884-85	179	83,493	529,500	167,010	780,182

FORESTS.

APPENDIX B.—*Meteorological Observations made in Reserved Forests.*

| Month. | Mean of Hygrometer. | | | | | | | | Mean of Thermometer. | | | | | | Rain-fall. | | | | | | | |

FORESTS.

ANNUAL FORM No. 49.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1884. Acres.	Area on 1st April 1884. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 1st March 1885. Acres.	Area on 1st March 1885. Equivalent in square miles.	No. and date of Notification of addition or transfer.	Remarks.
		Demarcated State Forests.								
Melghat Division ...	Ellichpur District ...	Bairagarh Reserve ...	272,049	425	...	...	272,049	425	...	Published in the Hyd. *Residency Orders*, dated 20th March 1876.
		Gugamal do. ...	115,200	180	...	...	115,200	180	...	Do. do. do., 15th December 1882.
		Chikalda do. ...	2,400	4	...	...	2,400	4	...	Do. do. do., 15th November 1883
Amraoti do. ...	Amraoti District ...	Amraoti Hills Reserve ...	50,973	80	...	...	50,973	80	...	Chirori Reserve published in the *Hyderabad Residency Orders*, dated 1st August 1883.
South Berar Division.	Buldana District ...	Geru Matergaon Reserve...	45,992	72	...	...	45,992	72	...	Published in the *Hyd. Residency Orders*, dated 15th March 1883
		Amdari Reserve ...	13,717	21	...	...	13,717	21	...	Do. do. do., 15th February 1883.
	Buldana, Akola, and Basim Districts ...	Ghat Bori Reserve ...	23,760	37	...	...	23,760	37	...	Do. do. do., 15th March 1883.
	Akola District ...	Mandwa do. ...	5,475	9	...	...	5,475	9	...	Do. do. do., 1st December 1882.
		Loni do. ...	908	1	...	...	908	1	...	Do. do. do., 15th March 1883
		Bhongaon do. ...	1,368	2	...	...	1,368	2	...	Do. do. do., do.
	Basim do. ...	Penganga do. ...	11,575	18	...	...	11,575	18	...	Do. do. do., do.
		Rui do. ...	6,647	10	...	...	6,647	10	...	Do. do. do., 2nd January 1883
		Gahuli do. ...	...	...	8,572	...	8,572	13	...	Do. do. do., 1st November 1884.
	Do. do. ...	Kinwat do. ...	52,558	82	...	...	52,558	82	...	Do. do. do., 15th March 1883
		Kelapur do. ...	40,747	64	...	458	40,289	63	Secretary for Berar's No. 462, dated 28th February 1883.	Do. do. do., 16th February 1885.
Wun Division ...	Wun District ...	Gondwakri do. ...	16,359	26	...	...	16,359	26	...	Do. do. do., do.
		Khorad do. ...	16,117	25	...	...	16,117	25	...	Do. do. do., do.
		Pathrot do. ...	2,889	5	...	...	2,889	5	...	Do. do. do., do.
		Anjankheir do. ...	7,634	12	...	...	7,634	12	...	Do. do. do., do.
		Lonbehel do. ...	8,966	14	471	...	9,437	15	...	Do. do. do., do.
		Twisala do. ...	3,593	6	1,280	...	4,873	8	...	Do. do. do., do.
		Teak tracts at— Mangla, Renkapur, Dapura, Jalgaon, & Aurangpur } Reserve ...	153	...	...	40 6 21 54 32	...	...	Secretary for Berar's No. 1066, dated 4th May 1883, and Assistant Secretary for Berar's No. 7-C., dated 15th January 1885.	
		Phiski Reserve... ...	2,342	4	...	2,342	...	...		
		Bhiokund Reserve ...	3,433	5	...	3,433	...	...		
		Krishnapur do. ...	3,933	6	...	3,933	...	...		
		District Reserved Forests.								
Direction Division	Ellichpur District ...	Ellichpur District ...	35,857	56	...	35,857	...	...	Transfd. to Melghat Division.	
	Amraoti do. ...	Amraoti do. ...	150,327	235	...	150,327	...	...	Do. to Amraoti do.	
	Akola do. ...	Akola do. ...	49,224	77	24	...	49,248	77		
	Buldana do. ...	Buldana do. ...	5,132	8	...	...	5,132	8		
	Wun do. ...	Wun do. ...	71,272	111	...	71,272	...	...	Do. to Wun do.	
	Basim do. ...	Basim do. ...	25,465	40	...	25,465	...	...	Do. to South Berar do.	
Melghat Division ...	Ellichpur do. ...	Ellichpur do. ...	...	...	35,857	...	35,857	56	Secretary for Berar's No. 935, dated 16th April 1883.	
Amraoti do. ...	Amraoti do. ...	Amraoti do. ...	...	...	150,327	...	150,327	235	2nd Asst. Resident's No. 1720, dated 20th July 1883.	
Wun do. ...	Wun do. ...	Wun do. ...	...	...	73,937	54,815	19,124	30	Secretary for Berar's No. 1066, dated 4th May 1883, and Asst. Secy. for Berar's 7-C., dated 15th Jany. 1885.	
	Basim do. ...	Basim do. ...	...	...	25,465	6,427	19,038	30	...	
		Total	1,046,065	1,635	295,935	354,482	987,518	1,544		

FORESTS.

Annual Form No. 49.—(*continued*).

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1884. Acres.	Area on 1st April 1884. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 1st March 1885. Acres.	Area on 1st March 1885. Equivalent in square miles.	No. and date of Notification of addition or transfer.
	Unreserved Forests managed by Forest Officers.								
Melghat Division ...	Ellichpur District ...	Melghat Taluk ...	586,400	916	...	...	586,400	916	
	Akola District ...	Akot Taluk [land in Melghat Hills.] ...	1,460	2	...	...	1,460	2	Secretary for Berar's No. 935, dated 16th April 1883.
		Jalgaon Taluk [land in Melghat Hills.] ..	4,476	7	...	...	4,476	7	
Amraoti Division	Amraoti District...	Amraoti Taluk [land in Amraoti Hills.] .	2,358	4	...	...	2,358	4	Second Assistant Resident's No. 1720, dated 20th July 1883.
		Chandur Taluk [land in Amraoti Hills.] ...	1,003	2	...	...	1,003	2	
		Total ...	595,697	931	...	...	595,697	931	
	District Unreserved Forests.								
Direction Division ,,	Ellichpur District ...	Ellichpur District ...	360	1	...	360	...	...	Transferred to Melghat Division.
	Amraoti do. ...	Amraoti do. ...	14,162	22	...	14,162	...	...	Transferred to Amraoti Division.
	Akola do. ...	Akola do. ...	81,469	127	2,107	541	84,035	131	
	Buldana do. ...	Buldana do. ...	173,793	272	1,842	9,513	166,122	260	
	Wun do. ...	Wun do. ...	446,178	697	...	446,178	...	...	Transferred to Wun Division.
	Basim do. ...	Basim do. ...	454,627	710	...	454,627	...	...	Transferred to South Berar Division.
Melghat Division.	Ellichpur do. ..	Ellichpur do. ...	...	...	360	232	128	..	Secretary for Berar's No. 935, dated 16th April 1883.
Amraoti do. ...	Amraoti do. ..	Amraoti do. ...	...	...	14,162	...	14,162	22	Second Assistant Resident's No. 1720, dated 20th July 1883.
Wun do. ...	Wun do. ...	Wun do. ...	...	...	501,672	5,026	496,646	776	Secretary for Berar's No. 1066, dated 4th May 1883, and Asst Secy. for Berar's No 7 C., dated 15th January 1885.
South Berar Division ...	Basim do. ...	Basim do. ...	...	...	458,013	9,734	448,279	700	
		Total ...	1,170,589	1,829	979,156	940,373	1,209,372	1,889	
		Grand Total of Unreserved Forests	1,766,286	2,760	979,156	940,373	1,805,069	2,820	

Annual Form No. 50.—*Area of Plantations*, 1884-85.

Division.	Name of Plantation.	On 1st April 1884. Area.	On 1st April 1884. Cost.	Added during 1884-85. Area.	Added during 1884-85. Cost.	On 31st March 1885. Total area.	On 31st March 1885. Total cost.	Remarks.
	Regular Plantations. Batragarh Reserve.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	
Melghat Division.	Pili	52	2,112	...	..	52	2,112	Teak.
	Rakiadoh	13	2,163	...	...	13	2,163	Do. and bamboo.
	Sembadoh	2	28	...	...	2	28	Do. do.
	Dugapati	11	435	...	...	11	435	Do. do.
	Pipileotah	160	5,083	...	...	160	5,083	Do. do.
	Saoli	110	4,860	...	...	110	4,860	Do. do.
	Bujru	31	2,259	...	...	31	2,259	Do. do.
	Labu	279	3,972	...	...	279	3,972	Do. do.
	Saoli and Kurita ...	30	2,233	...	...	30	2,233	Do. do.
	Jambulwaree ..	600	4,325	...	...	600	4,325	Do. do.
	Abapur	120	5,072	...	...	120	5,072	Do do.
	Kolkas	1	1,118	..	91	1	1,209	Forest garden.
	Miscellaneous charges .	...	433	...	514	.	947	
	Total Regular Plantations	1,409	34,093	...	605	1,409	34,698	
	Cultural operations.							
Melghat Division.	Gugamal Reserve ...	...	135	...	10	...	145	Broad-cast sowing.
	Ellichpur District Forests	...	77	...	...	...	77	Sowing avenues with babul.
Direction Division ..	Buldana do.	...	6	...	...	...	6	Collecting babul seed.
	Miscellaneous charges...	...	39	...	..	.	39	Do do.
Amraoti Division.	Amraoti Hills Reserve .	633	501	334	286	967	787	Sowing blanks with babul, tewas, and bamboo.
	Amraoti District Forests.	1	544	11	219	12	763	Nursery of fruit trees at Karanja for roadside planting.
South Berar Division ...	Loni Reserve ...	470	430	16	84	286	514	Sowing blanks with babul and prosopis.
	Bhongaon Reserve ...	347	341	...	21	347	362	
	Geru Matergaon Reserve	...	9	247	30	247	39	Teak sowing.
	Ghat Bori do. ...	...	65	271	44	271	109	Do.
	Penganga do. ...	...	...	...	83	..	83	Collecting teak seed.
	Rui do. ...	...	...	...	60	...	60	
	Amdari do. ...	...	...	...	18	...	18	
Wun Division ...	Darwha Range ...	...	...	...	48	...	48	Sowing towns seed.
	Kelapur Reserve ...	...	...	...	46	...	46	Do. do.
	Miscellaneous charges...	...	30	...	234	...	264	Collecting teak seed.
	Total Cultural Operations	1,251	2,177	879	1,183	2,130	3,360	
	Grand Total ...	2,660	36,270	879	1,788	3,539	38,058	

FORESTS.

ANNUAL FORM No. 51.—*Area of Forest tracts protected from fire during dry season* 1885.

Division.	Forest tracts.	Up to 30th June 1884. Area actually protected.	Up to 30th June 1884. Total cost.	During dry season of 1885. Area attempted to be protected.	Failures.	Actually protected.	Amount expended.	Total cost up to 30th June 1885.	Year when protection commenced.	Remarks.
		Acres.	Rs.	Acres.	Acres.	Acres.	Rs.	Rs.		
Direction Division.	District Reserves.	....	122	...	...	...	...	122		Miscellaneous expenditure.
Melghat Division.	Bairagarh Reserve, Raipur block.	14,231	6,514	14,231	...	14,231	137	6,651	1870	
	Remainder of Reserve.	257,705	7,213	257,818	180	257,638	1,228	8,441	1872	
	Gugumal Reserve	115,200	3,536	115,200	80	115,120	437	3,973	1877	
	Chikalda Reserve	2,400	78	..	...	...	...	78	1880	Fire protection discontinued.
	Total ...	389,536	17,341	387,249	260	386,989	1,802	19,143		
Amraoti Division.	Amraoti Hills Reserve.	13,071	1,618	13,071	...	13,071	231	1,849	1881	
South Berar Division.	Geru Matergaon Reserve.	45,922	3,736	45,992	1,214	44,778	281	4,017	1880	
	Ghathori Reserve.	28,535	2,627	29,235	2,402	26,833	196	2,823	1881	
	Penganga do.	10,375	1,837	11,575	...	11,575	159	1,996	1880	
	Loni and Bhongaon Reserve.	2,276	5	2,276	...	2,276	...	5	1882	
	Rui Reserve.	5,027	289	6,647	...	6,647	48	337	1882	
	Amdari do.	13,667	295	13,717	16	13,701	153	448	1883	
	Gahuli do.	...	...	9,507	...	9,507	82	82	1885	
	Total ...	105,802	8,789	118,949	3,632	115,317	919	9,708		
Wun Division.	Kinwat Reserve.	51,152	4,045	52,558	324	52,234	683	4,728	1881	
	Kelapur do.	10,847	1,764	40,289	4,463	35,826	380	2,144	1881	
	Darwha Range.	43,645	1,848	52,436	5,071	47,365	1,030	2,878	1882	
	Wun do.	8,269	381	4,873	930	3,943	14	395	1882	
	Total ...	113,913	8,038	150,156	10,788	139,368	2,107	10,145		
	Grand Total ...	622,322	35,908	669,425	14,680	654,745	5,059	40,967		

Charged in previous years	34,703
Do. do. 1884-85	4,697
Do. do. 1885-86	1,567
Total ...	40,967

ANNUAL FORM No. 52.—*Prosecutions for breaches of Forest Rules during* 1884-85.

Forest Division and Civil District.	Cases pending from 1883-84.	New cases of the year. Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Disposed of during the year. Convictions. Cases.	Convictions. Persons.	Acquittals. Cases.	Acquittals. Persons.	Total. Cases.	Total. Persons.	Cases pending at close of year.
Melghat Division.														
Reserved Forests	...	1	6	...	2	9	9	9	29	...	...	9	29	...
Unreserved do.	...	...	...	...	137	137	137	117	171	20	42	137	213	...
Ellichpur District Forests.	...	...	11	...	...	11	11	8	8	3	4	11	12	...
Amraoti Division.														
Amraoti Hills Reserve.	...	...	5	5	10	20	20	14	50	6	24	20	74	...
Amraoti District Forests.	...	...	19	...	7	26	26	20	27	5	5	25	32	1
South Brar Division.														
Reserved Forests ...	...	...	14	28	8	50	50	48	106	2	5	50	111	...
Basim District Forests.	...	..	27	1	1	29	29	26	45	2	6	28	51	1
Wun Division.														
Reserved Forests ..	2	..	8	2	1	11	13	11	21	2	2	13	23	...
Wun District Forests.	1	...	5	10	...	15	16	8	33	8	18	16	51	...
Total ...	3	1	95	46	166	308	311	261	490	48	106	309	596	

FORESTS.

ANNUAL FORM No 53.—*Summary of Revenue and Expenditure of the different Divisions during* 1884-85.

Budget Heads.—Revenue.	Direction Division.	Melghat Division.	Southern Division.	Wun Division.	Amraoti Division.	Total.
REVENUE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—*Timber and other produce removed from the Forests by Government Agency :—*						
a. Timber...	...	...	...	...	...	...
b. Firewood and charcoal	...	...	...	...	...	...
c. Bamboos	...	...	...	...	...	...
d. Sandal-wood	...	...	...	...	...	...
e. Grass and other minor produce ...	...	...	...	...	...	...
II.—*Timber and other produce removed from the forests by consumers or purchasers :—*						
a. Timber...	1,806 0 4	68,734 7 10	1,384 10 0	1,521 8 9	2,073 15 0	75,520 9 11
b. Firewood and charcoal	1,839 11 0	6,569 7 0	1,715 2 0	257 7 6	5,602 0 1	15,983 11 7
c. Bamboos	18 7 0	31,670 4 3	5 0 0	1,075 8 0	...	32,769 3 3
d. Grazing and fodder grass	31,832 8 9	13,243 1 6	19,967 11 2	30,123 15 11	52,403 13 2	1,47,571 2 6
e. Other minor produce	2,184 2 9	4,826 4 9	3,336 7 6	4,737 14 6	3,459 6 3	18,544 3 9
III.—*Confiscated, drift, and waif wood* ...	211 4 6	1,006 13 3	...	68 9 9	11 12 6	1,298 8 0
IV.—*Revenue from forests not managed by Government :—*						
a. Duty on foreign timber and other forest produce	...	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...	...
V.—*Miscellaneous :—*						
a. Fines and forfeitures	8 0 9	...	...	21 0 0	...	29 0 9
b. Refunds	2 8 9	1 5 4	9 14 11 *b*—9 12 7	2 8 0	...	6 8 5
c. Other sources	1,018 0 6	88 3 0 *a* +469 12 0	22 14 0	48 0 6	77 12 0	1,724 10 0
Total Revenue ...	38,920 12 4	1,26,139 14 11 +469 12 0	26,441 11 7 −9 12 7	37,856 8 11	63,628 11 0	2,93,447 10 2

Summary of Revenue and Expenditure.

Budget Heads.—Revenue.	Direction Division.	Melghat Division.	Southern Division.	Wun Division.	Amraoti Division.	Total.
EXPENDITURE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS.						
I.—*Timber and other produce removed from the forests by Government Agency :—*						
a. Timber	...	...	...	...	...	...
b. Firewood and charcoal	...	...	...	...	...	...
c. Bamboos	...	...	...	...	...	...
d. Sandal-wood	...	...	...	...	...	...
e. Grass and other minor produce ...	...	...	...	...	...	...
II.—*Timber and other produce removed from the forests by consumers or purchasers* ...	6 13 0	286 0 10	20 6 0	124 3 0	..	437 6 10
III.—*Confiscated, drift and waif wood* ...	...	...	...	...	...	...
IV.—*Revenue from forests not managed by Government :—*						
a. Duty on foreign timber and other forest produce	...	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...	...
V.—*Rents of leased forests and payments to shareholder in forests managed by Government* ...	...	17,119 12 0	...	...	...	17,119 12 0
VI.—*Live stock, stores, tools and plant :—*						
a. Purchase of cattle	...	...	...	...	...	...
b. Feed and keep of cattle	904 11 8	751 8 10 *j* +40 7 0	722 1 9	...	...	2,418 13 3
c. Stores, tools, and plant	32 11 0	174 0 2 *f*—44 4 6 *i* +288 13 6	515 8 10	24 7 9	421 10 9	1,412 15 6
VII.—*Communications and buildings :—*						
a. Roads and bridges...	14 3 0	15,433 12 5 *i* +288 13 6	181 5 6	12 4 0	109 3 0	15,461 14 5
b. Buildings	...	569 5 0	169 7 0	27 13 0	34 9 0	797 2 0
c. Other works	4 7 0	183 7 3	...	...	...	187 14 3
VIII.—*Demarcation, improvement, and extension of forests :—*						
a. Demarcation	...	187 11 0	289 8 0	6 8 0	189 12 0	673 7 0
b. Compensation for land and rights ...	...	...	...	930 8 0	128 8 0	1,059 0 0
c. Surveys and working plans	...	...	...	...	...	...
d. Plantations	...	610 9 11 *f* +3 13 6	340 3 5	327 10 4	505 6 0	1,787 11 2
e. Protection from fire	...	1338 2 7	804 8 0	2,355 15 8	198 10 0	4,697 4 3
f. Other works	348 0 6	11 12 0	...	...	20 11 0	380 7 6
IX.—*Miscellaneous :—*						
a. Refunds	142 13 0	3 8 0	11 0 0 *k* +5 0 0	...	...	162 5 0
b. Law charges	...	...	...	4 4 0 *b*—4 4 0	...	...
c. Other charges	990 13 5	1,264 6 0	27 2 0	...	6 2 0	2,288 7 5
Total A.—Conservancy and Works...	2,444 8 7	37,734 0 0	3,077 2 6 +5 0 0	3,813 9 9 −4 4 0	1,614 7 9	48,684 8 7

FORESTS.

ANNUAL FORM No. 53.—*Summary of Revenue and Expenditure of the different Divisions during* 1884-85.—(Continued).

Budget Heads—Expenditure.	Direction Division.	Melghat Division.	Southern Division.	Wun Division.	Amraoti Division.	Total.
EXPENDITURE—(contd.)	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought over Total A.—Conservancy and Works	2,444 8 7	37,734 0 0	3,077 2 6 +5 0 0	3,813 9 9 —4 4 0	1,614 7 9	48,684 8 7
B.—ESTABLISHMENTS.						
I.—Salaries:—						
a. Conservators	15,862 14 4 *b* +37 1 7	...	...	...	...	15,899 15 11
b. Superior Officers	...	6,600 0 0 *h* +425 12 11	6,599 14 11	8,058 1 0	2,400 0 0	24,083 12 10
c. Subordinate Forest and Depôt Establishments	1,848 4 6	15,003 7 4	5,914 9 10	6,064 4 2 *d*—3 8 9	2,375 8 8	31,202 9 9
d. Office Establishments ...	3,219 7 8	3,498 4 0	1,340 11 3	1,019 1 9	624 10 11	9,702 3 7
e. Deputation and special allowances.	...	...	...	...	...	...
II.—Travelling Allowances.						
a. Conservators	1,033 12 0	...	...	...	...	1,033 12 0
b. Superior Officers	...	1,534 0 0	1,126 4 0	1,230 4 11	663 13 4	4,554 6 3
c. Subordinate Forest and Depôt Establishments	154 6 0	668 13 7	73 6 0	267 4 0	19 2 0	1,182 15 7
d. Office Establishments ...	98 3 9	361 0 0	333 4 8	202 15 0	130 10 8	1,126 2 1
III.—Contingencies:—						
a. Stationery	154 1 9	89 3 6	16 3 9	32 9 2 *j* +1 10 0	13 1 6	306 13 8
b. Carriage of tents and records ...	274 1 10	595 1 6	440 8 1	404 9 11	323 1 4	2,037 6 8
c. Rents, rates, and taxes ...	...	400 0 0	...	113 6 3	...	513 6 3
d. Pay of police guards... ...	...	...	...	...	...	...
e. Official postage	265 10 6	248 13 0	152 6 0	33 9 0	28 13 0	729 3 6
f. Sundries	4,288 8 0 *e*— 0 0 2	285 12 4 *g* +180 13 8	482 0 2	3,545 3 10 *j*—1 10 0	2,726 4 10	11,457 0 8
Total B.—Establishments ...	27,199 6 4 +37 1 5	29,234 7 3 +606 10 7	16,479 4 8	20,971 5 0 —3 8 9	9,305 2 3	1,03,829 12 9
Grand Total of all Expenditure ...	29,643 14 11 +37 1 5	66,968 7 3 +606 10 7	19,556 7 2 +5 0 0	24,784 14 9 —7 12 9	10,919 10 0	1,52,514 5 4

a Rent of Forest Bungalow, Chikalda, during the year.
b Conservator's pay for 6th January 1885.
c. Excess payments on account of law charges.
d. Do. of salary.
e. Do. of remuneration to Patalls, &c.
f. See this Office No. 145, dated 3rd April 1885.
g Rs. 180-13-8 on account of medicines supplied by the Principal Medical Storekeeper, Bombay, and pies 2—see your Office No. 131, dated 22nd May 1885.
h. Deputation allowance of Mr. C. Bearshawe.
i. Conservator's No. 101, dated 11th May 1885.
j. Vide Conservator's Objection Statement on Wun Division Accounts for October 1884, items 39 and 40.
k. Being revenue refund erroneously charged to Civil by Deputy Commissioner, Basim, instead of to Forest.
l. Being amount recovered by Treasury Officer, Ellichpur, included in the Treasury Accounts and again brought on the Forest Accounts.

COMPTROLLER'S OFFICE,
BOLARUM,
The 22nd June 1885.

T. H. S. BIDDULPH,
Comptroller,
Hyderabad.

FORM No. 54.—*Account Current for the year* 1884-85.

Dr. | *Cr.*

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To *Cash balance*		3,967 5 0	*By* 3.—*Refunds and drawbacks* (Revenue Refunds—Forests)...	...	
„ *IX.—Forests*	2,93,447 10 2		„ 13.—*Forests*	1,52,514 5 4	
„ *Service funds*	71 2 6		„ *Deposits*	...	
„ *Deposits* ...	...		„ *Forest cash remittances, local:—*		
„ *Forest cash remittances, local:—*					
Forest cheques drawn ...	1,50,180 0 1		Remittances to treasuries ...	2,93,009 2 9	
Inter-divisional transfers ...	7,126 0 3		Inter-divisional transfers ...	7,126 0 3	
		4,50,824 13 0	*Cancelled cheques*	2,070 6 9	
					4,54,719 15 1
To *Advances recoverable* ...	48,847 3 7		*By Advances recoverable* ...	43,911 12 1	
„ *Suspense*	...		„ *Suspense* ...	...	
„ *Account current (other Governments)* ...	643 12 2		„ *Account current (other Governments)* ...	692 5 3	
„ *Inter-departmental transfers* ...	86 2 11		„ *Inter-departmental transfers* ...	5 0 0	
		49,577 2 8			44,609 3 4
			„ *Cash balance*	...	5,040 4 3
	Total ...	5,04,369 4 8		Total ...	5,04,369 4 8

COMPTROLLER'S OFFICE,
BOLARUM,
The 22nd June 1885.

T. H. S. BIDDULPH,
Comptroller, Hyderabad.

FORESTS.

ANNUAL FORM No. 55.—*Outstandings and liabilities on account of Contractors and Disbursers during* 1884-85.

	Department debtor.			Department creditor.			Balance due	
	At commencement of the year.	Recoveries in cash, &c.	At close of the year.	At commencement of the year.	Payments made during the year.	At close of the year.	To Department (outstanding.)	By Department, Liabilities.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Direction.	...	14,594 14 5	14,594 14 5	10,010 12 10	5,921 4 4	15,932 1 2	1,337 2 9	..
Melghat..	...	6,773 10 1	6,773 10 1	5,654 2 11	8,807 4 0	14,461 6 11	7,687 12 10	...
Southern.	...	8,866 2 9	8,866 2 9	790 5 4	9,281 10 7	10,071 15 11	1,205 13. 2	.
Wun ...	...	14,824 13 11	14,824 13 11	199 7 6	15,480 6 9	15,679 14 3	855 0 4	...
Amraoti..	...	3,761 10 5	3,761 10 5	...	4,421 2 5	4,421 2 5	659 8 0	...
Total...	...	48,821 3 7	48,821 3 7	16,654 12 7	43,911 12 1	60,566 8 8	11,745 5 1	....

COMPTROLLER'S OFFICE, BOLARUM,
The 22nd June 1885.

T. H. S. BIDDULPH,
Comptroller, Hyderabad.

ANNUAL FORM No. 56.—*Revenue received and outstandings on account of revenue during* 1884-85.

Division.	Particulars.	Outstanding at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realised during year.	Balance due to the Department at end of year.	Remarks.
			Rs. p.	Rs. a. p.	Rs. a. p.		
Direction ...		...	38,920 12 4	38,920 12 4	38,920 12 4	...	
Melghat		...	1,26,609 10 11	1,26,609 10 11	1,26,609 10 11	...	
Southern... ...		...	26,431 15 0	26,431 15 0	26,431 15 0	...	
Wun		...	37,856 8 11	37,856 8 11	37,856 8 11	...	
Amraoti		...	63,628 11 0	63,628 11 0	63,628 11 0	...	
	Total ...	...	2,93,447 10 2	2,93,447 10 2	2,93,447 10 2	...	

COMPTROLLER'S OFFICE, BOLARUM,
22nd June 1885.

T. H. S. BIDDULPH,
Comptroller, Hyderabad.

ANNUAL FORM No 57.—*Financial results of the year* 1884-85.

Division.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvement of forests.	Total.		Remarks
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Direction Division ...	...	...	38,921	22,272	7,409	38,921	29,681	
Amraoti do. ...	...	...	63,629	7,302	3,618	63,629	10,920	
Melghat do. ...	...	...	1,26,610	41,962	25,613	1,26,610	67,575	
South Berar do. ...	...	...	26,432	13,351	6,210	26,432	19,561	
Wun do. ...	...	...	37,856	15,869	8,908	37,856	24,777	
Total ...	...	...	2,93,448	1,00,756	51,758	2,93,448	1,52,514	

FORESTS.

ANNUAL FORM No. 58.—*Trees felled by Government Agency during the year* 1884-85.—(*Improvement fellings.*)

Division.	Trees felled.		Remarks.
	Description.	Number.	
Melghat Division	Teak trees	688	Felled in the Bairagarh Reserve.
	Tewas „	2	
	Dhamin „	1	
	Arang „	1	
	Tendu „	3	
	Haldu „	15	
	Lendya „	9	
	Aola „	2	
	Mohin „	2	
	Dudda „	1	
	Mowha „	2	
	Sadra „	2	
	Kekda „	7	
	Dowra „	22	
	Kuroom „	5	
	Fasi „	1	
	Total ...	764	

FORESTS.

Annual Form No. 63.—*Timber and other produce cut, collected, and removed from the Forests by consumers or purchasers, including pasture, during the year* 1884-85.

Division.	Produce removed. Description.	No. or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
Direction Division ...	Timber ... C. ft. ...	...	1,806	1,806	II. a.
	Firewood ... ,, ...	...	1,840	1,840	II. b.
	Bamboos ... No. ...	...	18	18	II. c.
	Grass ... lbs. ...	...	31,833	31,833	II. d.
	Minor Produce ... ,, ...	...	2,184	2,184	II. e.
	Total Revenue under II. ...	...	37,681	37,681	
Melghat Division	Teak trees ... No. ...	688	1,038		
	Tewas ,, ... ,, ...	2	1		
	Dhamin ,, ... ,, ...	1	1		
	Arang ,, ... ,, ...	1	2		
	Tendu ,, ... ,, ...	3			
	Haldu ,, ... ,, ...	15	16		
	Lendia ,, ... ,, ...	9			
	Aola ,, ... ,, ...	2	...		
	Mohin ,, ... ,, ...	2	1		
	Dudda ,, ... ,, ...	1	...		
	Mowah ,, ... ,, ...	2	...		
	Sadra ,, ... ,, ...	3	6		
	Kekda ,, ... ,, ...	7	5		
	Dowra ,, ... ,, ...	22	15		
	Kurum ,, ... ,, ...	5	3		
	Fasi ,, ... ,, ...	1			
	Total Trees ...	764	1,094	1,094	
	or C. ft. ...	4,021			
	Teak, Tewas, and Sesham ... C. ft. ...	160,726	45,922	67,641	
	Other wood ... ... ,, ...	152,035	21,719		
	Total Timber ...	316,782	68,735	68,735	II. a.
	Firewood ... ... C. ft.	128,949	3,542	6,372	
	Charcoal ... ... ,, ...	125,844	2,830		
	Total Fuel and Charcoal ...	254,793	6,372	6,372	II. b.
	Bamboos ... ... No. ...	3,167,026	31,670	31,670	II. c.
	Grass ... ... lbs. ...	5,623,905	1,623	1,623	
	Grazing camels ... ... No. ...	175	47		
	,, buffaloes ... ... ,, ...	17,613	2,354		12,374 II d.
	,, cows and bullocks ... ,, ...	97,826	6,655		
	,, sheep and goats ... ,, ...	50,607	1,695		
	Total Grazing ...	166,221	10,751	10,751	
	Teak leaves ... ... lbs. ...	688,272	827		
	Roots and fruits ... ... ,, ...	1,915,158	3,409		
	Lac ... ... ,, ...	30,513	217		
	Gum ... ... ,, ...	3,[illegible]6	15		
	Burnt lime ... ... ,, ...	1[illegible],650	16		
	Miscellaneous ... ... ,, ...	10,481	48		
	Total Minor produce ...	2,661,790	4,532	4,532	II. e.
	Ellichpur District Forests.				
	Firewood	...	198	198	II. b.
	Grass	...	869	869	II. d.
	Minor produce	...	294	294	II. e.
	Total Revenue under II... ...	...	125,044	1,25,044	
Amraoti Division	Timber of kinds ... ... C. ft.	415	59	59	II. a.
	Firewood ... ... ,, ...	84,645	3,030	3,030	II. b.
	Grass ... ... lbs.	8,078,508	6,966		
	Grazing buffaloes ... ... No.	628	296	6,966	
	Cows and bullocks ... ... ,,	5,164	742		
	Sheep and goats ... ... ,,	8,559	561		8,565 II. d.
	Total Grazing ...	14,651	1,599	1,599	
	Minor produce lbs. ...	177,851	183	183	II. e.
	Amraoti District Forests.				
	Timber ... ... C. ft.	...	2,015	2,015	II. a.
	Firewood.. ... ... ,, ...	...	2,572	2,572	II. b.
	Grass ... ... lbs. ...	...	43,839	43,839	II. d.
	Minor produce ... ... ,, ...	...	3,276	3,276	II. e.
	Total Revenue under II. ...	...	63,539	63,539	
South Berar Division	Timber ... ... C. ft.	8,638	1,067	1,067	II. a.
	Firewood... ... ... ,, ...	12,998	387	387	II. b.
	Grass ... ... lbs.	5,330,509	2,015	2,015	
	Grazing buffaloes ... ... No.	1,382	4,161		6176 II.
	Cows and bullocks ... ... ,,	15,555		4,151	
	Minor produce ... ... lbs. ...	...		6	II. e.
	Basim District Forests.				
	Timber ... ... C. ft.	...	317	317	II. a.
	Firewood .. .. ,, ...	...	1,328	1,328	II. b.
	Bamboos .. .. ,, ...	...	5	5	II. c.
	Grass ... ... lbs. ...	...	13,792	13,792	II. d.
	Minor produce ... ... ,, ...	...	3,328	3,328	II. e.
	Total Revenue under II. ...	....	26,409	26,409	
Wun Division	Timber ... ... C. ft.	1,970	302	302	II. a.
	Firewood ... ... ,,	184	4	4	II. b.
	Bamboos ... ... No....	81,600	816	816	II. c.
	Grass ... ... lbs. ...	3,900,855	2,678	2,678	
	Grazing buffaloes ... ... No....	357	134		4,418 II.
	Cows and bullocks ... ,,	7,729	1,606		
	Total Grazing ...	8,086	1,740	1,740	
	Minor produce ... ... lbs.	...	13	13	II. e.
	Wun District Forests.				
	Timber ... ... C. ft.	...	1,219	1,219	II. a.
	Firewood ... ... ,, ...	...	253	253	II. b.
	Bamboos ... ... No. ...	...	260	260	II. c.
	Grass ... ... lbs. ...	...	25,706	25,706	II. d.
	Minor produce ... ... ,, ...	...	4,725	4,725	II. e.
	Total Revenue under II ...	...	37,716	37,[illegible]	
	Total Revenue of the Circle under II		2,90,389	2,90,380	

FORESTS.

ANNUAL FORM No. 65.—*Abstract showing the value of live stock, stores, tools and plant, for the year* 1884-85.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
			Rs.			Rs.			
Direction Division.									
Surveying and other instruments ...	19	...	...	16	...	...			
Tools	286	...	...	195	...	...			
Furniture	154	...	100	137	...	75			
Tents	7	...	1,439	7	...	1,439			
Miscellaneous stores	116	...	...	60	...	...			
Elephant	1	...	3,000	1	...	3,000			
Total ...	583	...	4,539	416	...	4,514			
Amraoti Division.									
Surveying and other instruments ...	2	...	4	2	...	4			
Tools	48	...	9	53	...	9			
Furniture	37	...	136	49	...	188			
Tents	3	...	510	3	...	510			
Miscellaneous stores	20	...	18	23	...	18			
Total ...	110	...	677	130	...	729			
Melghat Division.									
Surveying and other instruments ...	14	...	...	15	...	...			
Tools	635	...	...	689	...	953			
Furniture	162	...	315	179	...	1,167			
Tents	4	...	711	4	...	711			
Bungalows	2	...	8,000	1	...	5,000			
Miscellaneous stores	212	...	..	216	...	392			
Elephant	1	...	1,283	1	...	800			
Bullocks	7	...	195	5	...	155			
Total ...	1,037	...	10,504	1,110	...	9,178			
South Berar Division.									
Surveying and other instruments ...	6	...	...	6	...	...			
Tools	199	...	...	240	...	11			
Furniture	50	...	...	56	...	3			
Tents	9	...	622	9	...	628			
Miscellaneous stores	68	...	90	80	...	98			
Elephant	1	...	1,112	1	...	1,112			
Total ...	333	...	1,824	392	...	1,852			
Wun Division.									
Surveying and other instruments ...	23	...	...	25	...	...			
Tools	161	...	...	160	...	130			
Furniture	30	...	110	36	...	223			
Tents	3	...	581	3	...	581			
Miscellaneous stores	57	...	94	86	...	85			
Total ...	274	...	785	310	...	1,019			
Grand Total ...			18,329	Total ...		17,292			

G. J. VAN SOMEREN, MAJOR,

Conservator of Forests,

Hyderabad Assigned Districts.

The 17th July 1885.

Extract from the Proceedings of the Resident at Hyderabad, No. 2172, dated Hyderabad Residency, the 5th September 1885.

Read—

The Annual Report on Forest Administration in the Hyderabad Assigned Districts for the year 1884-85.

RESOLUTION.

THE year under review presents few features of special interest.

2. Survey operations were carried out in South Berar as well as in the Melghat, with the result that 375 square miles were topographically surveyed during the season.

3. The figures showing the results of protection of forests against fire are most creditable to the local officers.

4. Mr. Cordery is glad to find that the Conservator has been able to satisfy himself by actual experiment that light grazing can be permitted in the State Reserves within certain limits. The measure will at once swell the revenue of the Department, and be popular with the people.

5. The financial results show a decrease of nearly 11,000 Rupees in the surplus when compared with last year. The receipts, however, in that season were the largest ever known, and the Resident cannot consider the net surplus of, in round figures, Rs. 1,41,000 as other than satisfactory.

6. Mr. Cordery has much pleasure in conveying his appreciation of the good work done, and the interest shown in the working of the Berar Forests by Colonel Mackenzie and Mr. Ballantyne.

(By order.)

J. R. FITZGERALD,

Secretary for Berar

No. 1002F., dated Simla, the 11th October 1885.

From—A. MACKENZIE, Esq., Secretary to the Government of India, Home Dept.,

To—The Resident at Hyderabad.

I AM directed to acknowledge the receipt of your letter No. 318G., dated the 10th ultimo, submitting the Progress Report of Forest Administration in the Hyderabad Assigned Districts for the year 1884-85, with the Commissioner's remarks and your orders on it.

2. The changes in the constitution of forest areas under the control of the Forest Department are exhibited in the table given in paragraph 3 of the Conservator's Report. It is observed that Form No. 19, which purports to contain the details of the changes that have taken place in the areas of Reserved, District, and Unreserved Forests is unnecessarily complicated by a double entry of the areas transferred from the control of one Division to that of another.

3. The re-classification in the Akola, Buldana and Basim Districts was found not to be in accordance with the settlement agreement, and was consequently not carried out. The whole of the Amraoti and Wun Districts, however, and the two taluks of the Ellichpur District situated in the plains, have now been re-classified according to the original plan.

4. The subject of the boundaries of State Reserves is evidently now receiving the necessary attention. It is gathered from the Report under review that the boundary-marks had in many instances been allowed to fall into disrepair. The work of surveying the Melghat Reserves and the forests in South Berar has made considerable progress during the season. The total area topographically surveyed in detail was 375 square miles, of which 168 square miles were surveyed on the scale of 4 inches = 1 mile, the rest on the scale of 2 inches = 1 mile. At the special request of the Resident, the Imperial Forest Survey Branch did not confine itself to the survey of the State Forest property, but undertook the topography of the intervening country as well. The maps so far produced are excellent, and contain levelled contour lines at vertical intervals of 300 feet, with 15 intermediate sketched contour lines on the four-inch scale maps, and 10 on those drawn at a scale of 2 inches. No doubt maps of this description are extremely useful for the Forester as well as the Engineer; but, whether this degree of accuracy is necessary for the preparation of such Working-plans as we are now in a position to undertake in extensive forest areas like the Melghat, is a question which will be discussed in the orders which will be issued by the Government of India on the work of the Forest Survey Branch. If the assertion made by the present Conservator, that no Working-plans for the Berar forests are as yet needed, was accepted, the present large outlay on an accurate survey would appear to be at least premature. His Excellency the Governor General in Council cannot, however, admit the correctness of Major van Someren's remark, and desires that the collection of the necessary data for the preparation of Working-plans should be taken up without delay and should accompany or follow the survey as closely as possible.

5. The number of cases taken into court is shown in the subjoined table—

Year.	Number of new cases taken into Court.	Percentage of convictions to total number of cases decided by the Courts
1884-85	308	84
1883-84	381	86
Increase or decrease in 1884-85	—73	1

The number of cases taken into Court has decreased, whereas the percentage of convictions has slightly increased, which is satisfactory, especially as the protection of the forests seems to have been efficient in every way.

As regards fire protection, the following table discloses excellent results, the percentage of failures as well as the cost per square mile having materially decreased :—

Year.	Area attempted.	Failures.	Area protected.	Percentage of failures to area attempted.	Cost per square mile protected.
	Square miles.	Square miles.	Square miles.		Rs.
1884-85	1,046	23	1,023	2	5
1883-84	1,048	76	972	7	7
Increase or decrease in 1884-85	—2	—53	51	—5	—2

6. Fire protection in the Hyderabad Assigned Districts commenced in 1869-70 with 19,200 acres (30 square miles) of the Raipur Block in the Melghat Forests, while the area now in 1884-85 is 669,425 acres (1,046 square miles). The outlay on every acre attempted from the commencement has been 1·09 pie per acre per annum, and the percentage of failures has been 8·25 only. During the sixteen years of protection Rs. 40,967 have been spent, the average for the last four years being Rs. 5,340.

The Raipur Block of 14,231 acres is a model of fire protection, nothing having been burnt since 1871-72, that is, 13 years ago, and the annual outlay per acre has been under 5 pie. The remainder of the Bairagarh Reserve, some 403 square miles, has been protected since 1871-72, with 4·75 per cent. of failures and at an outlay of only 0·46 pie per acre. This is by far the largest piece of forest brought under fire protection in India, being more than 2½ times the size of Rajaborari in the Central Provinces, the next largest. The Gugamal Reserve of 180 square miles has also been under protection since 1873-74, with 4·33 per cent. of failures and an outlay of 5·25 pie per acre per annum. Fire protection on such a scale as this is without a parallel in the history of forestry. Next in size come Gerumatergaon, protected since 1873-74, containing 45,992 acres; the annual outlay was 1½ pie per acre, and the percentage of failures 8. Kinwat, which has been protected since 1875-76, at an annual cost of 1·7 pie, contains 52,558 acres; but here the percentage of failure has been large, *viz.*, 19·5.

In cheapness of fire-work Berar is first among all provinces, while its low rate of failure, 8·25 per cent., is good, considering the extensive areas attempted.

7. The Report contains remarks on the beneficial results of fire protection on natural reproduction and on the general improvement of the forest growth. It is, however, stated that the rigid exclusion of cattle from fire protected areas produced in many instances a crop of grass of such density as to prevent the penetration of the young tree growth. That under such circumstances the introduction of light grazing is not only permissible but frequently advisable, has always been acknowledged in scientific Forestry, and even in Europe, where the herbaceous growth is of much less density, the temporary opening to sheep grazing of forests in the stage of reproduction is often resorted to as the cheapest and yet a sufficiently effective way of weeding. With regard to this it is however essential that every forest should be treated on its own merits, which must be ascertained by local examination, and a general rule cannot be formulated. The complete reclothing of the forest areas can only be the work of time, but the changes already noticed after a comparatively short period of protection are very encouraging. The Conservator's remarks

with regard to the utter absence of myrobalan reproduction deserve your attention, and I am directed to suggest that a limited area of the reserves be periodically closed for a number of years against the collection of the fruit, in order to provide for the natural reproduction of this important tree, for artificial cultivation can only extend over very limited areas. The denudation of the Gurgamal Reserve of almost all seed-bearing teak trees under the former system of working is a matter of great regret, but the necessity for the reservation of parent trees of all, especially the more valuable species within closed reserves, is now, it appears, recognized by the Forest administration. The cutting back of badly-shaped trees in fire protected areas seems to have resulted in the growth of more useful timber, and operations in this direction should be continued whenever the produce can be disposed of.

The progress of cultural operations is shown as follows :—

	Area at the commencement of the year.	Area added.	Area at the close of the year.
	Acres.	Acres.	Acres.
Regular Plantations ...	1,409	.....	1,409
Cultural Operations ...	1,251	879	2,130
Total ...	2,660	879	3,539

8. The comparative summary of forest produce removed from the forests contained in paragraph 49 of the Report under review, shows a considerable decrease under every important item with the exception of bamboos and fruit (myrobalans). It is reported that the decreased demand for timber is partly due to the year 1885 being a Sinhast year, during which Hindus abstain from constructing new buildings, and partly to a failure of the cotton crop and the consequent impecuniosity of the people. This, however, would hardly account for the decrease in the outturn of firewood, and there seems apparently reason to believe that, as noted in the Report under review, the check at the Naka stations was not so effective as in former years, a question which deserves serious attention. The falling off in the amount of grass removed is probably to a great extent accounted for by the increased grazing permitted within the forests.

The outturn from the Melghat comprises—

Teak,	c.ft.	164,362
Other timber,	„	152,420
Firewood,	„	251,793
Bamboos,	No.	3,167,026

9. The financial results of the year's working are as follows :—

Class of Forests.	Receipts.	Charges.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
State Reserves	47,271	63,793	...	16,522
District „	55,596	26,934	28,662	...
Unreserved Forests	1,90,581	61,787	1,28,794	...
Total in 1884-85 ...	2,93,448	1,52,514	1,40,934	...
Total in 1883-84 ...	3,08,217	1,56,539	1,51,678	...
Decrease in 1881-85 ...	14,769	4,025	10,744	....

The financial results are not so favourable as they were in the preceding year, but this, as explained, is believed to be due to exceptional circumstances, some of which at least were beyond the control of the Forest administration. The management of State and District Reserves shows for the first time a Surplus of Rs. 12,140. The progress in this respect has been steady.

10. The Governor General in Council notices with satisfaction your commendation of the good work done by Colonel Mackenzie, the Deputy Commissioner of the Ellichpur District, and by Mr. Ballantine, Deputy Conservator of Forests, in charge of the Melghat Division.

No. 1003 F.

COPY, with copy of the Report referred to, forwarded to the Foreign Department for information.

No. 1004 F.

COPY, with copy of the Report referred to, forwarded to the Inspector General of Forests to the Government of India for information, with reference to paragraph 4.

Govt. C. B. Press, Simla.—No. 976 H. D.—20-10-25.—210.

No. 3986 of 1886.

FROM

COLONEL J. G. BELL,

Officiating Commissioner,

Hyderabad Assigned Districts,

To

THE SECRETARY FOR BERAR TO THE RESIDENT,

Hyderabad.

DATED AMRAOTI, *the 7th August* 1886.

SIR,

I have the honour to forward herewith the Report of the Conservator of Forests on the administration of the Forest Department during the year 1885-86. The report reached me on the 2nd August 1886.

2. The rules sanctioned by the Resident for connecting Forest officers more closely with the Civil administration of the province were in force during the year under report, and have been found to work well. A proposal for increasing the staff of Forest officers in Berar has lately been submitted to the Resident, which, if sanctioned, will enable the Conservator to put each district in charge of an officer; at present the Buldana and Basim Districts are under one officer.

Areas.

3. The area of forest lands on the 31st March 1886 was 4,342 square miles, against 4,364 square miles in 1884-85. During the year an area of 2 square miles was added to State reserves by a rectification of the area of the Gahuli reserve, and 9 square miles were added to the unreserved forests by the inclusion of land thrown up by cultivators, while 33 square miles were excluded owing to land having been given out for cultivation and other purposes in the Wun District.

Survey.

4. Survey operations were satisfactorily carried out in the Melghat with the result that 403 square miles were topographically surveyed during the year; and it is to be regretted that the health of the survey establishment suffered so much during the season.

Working plans.

5. In the orders on the Forest Report for 1884-85, the Government of India directed that the collection of the necessary data for the preparation of working plans should be taken up without delay and should accompany or follow the survey as close as possible. The present report shows that a commencement has been made to collect data for a working plan for two blocks of the Bairagarh forest in the Melghat, and that many of the conditions that must enter into any rational working plan already exist in Berar.

Breaches of Forest Rules.

6. The number of breaches of Forest Rules during the year amounted to 422, against 308 in the previous year. The increase was entirely in cases of unauthorized felling or appropriation of wood and minor forest produce. The increase in the Amraoti District was very large, being 87, against 24 in the previous year. The percentage of convictions however was bad, being 82·6, against 84·8 in the previous year. The Buldana District shows the worst in this respect. Out of 62 cases taken into Court, nearly 30 per cent. were acquitted.

7. The results of fire protection were not as good as in the previous year, owing chiefly to the fires in the Wun District, where 23,508 acres were burnt, against 10,788 in 1884-85. Some of the fires are attributed to Forest subordinates themselves and to shikaries entering the reserves; but apparently none of the offenders have been detected.

Fires.

8. The privilege of allowing cattle to graze, under certain limits, in the State forests has afforded considerable relief to the villages adjoining reserves where grazing may be scarce.

Grazing.

9. Natural reproduction is reported to be everywhere healthy, and measures have been taken to procure bamboo seed and to sow it in selected spots. In the several reserves very large quantities of seeds of various trees were sown broadcast over 4,416 acres.

Reproduction.

10. The work of opening out the Melghat with forest roads has been effectively pushed on during the year, and the existing roads have been maintained in good order.

Roads.

11. The quantity of produce removed from the forest was less than in the previous year; there was a decrease in timber of all kinds, due chiefly to the rains in December, which told very heavily against the export from the Melghat up to the end of January 1886.

Produce removed.

12. The total financial results of the year are satisfactory. The gross revenue amounted to Rs. 3,20,047, or more than in 1884-85 by Rs. 26,599, chiefly owing to a larger number of cattle grazed everywhere and to greater care in supervising grazing passes. The total expenditure was Rs. 16,521 more than in 1884-85, owing chiefly to the increase in the establishment of officers. The net surplus of the year was Rs. 1,61,012, or Rs. 20,078 more than in 1884-85.

Financial results.

13. On the whole, the administration of the forests during the year under review seems to have been satisfactory, and the thanks of the Resident are, in my opinion, due to the Conservator and officers of the department named by him.

I have the honour to be,

Sir,

Your most obedient Servant,

J. G. BELL, COLONEL,

Officiating Commissioner,

Hyderabad Assigned Districts.

No. 836 of 1886.

From

Lieutenant-Colonel G. J. van SOMEREN,

Conservator of Forests,

Hyderabad Assigned Districts,

To

The COMMISSIONER,

Hyderabad Assigned Districts,

Amraoti.

Chikalda, *the 5th July* 1886.

Sir,

I have the honour to forward the Report on Forest Administration in the Hyderabad Assigned Districts for the year 1885-86.

INTRODUCTION.

Throughout the year Lieutenant-Colonel G. J. van Someren was Conservator in charge of the circle.

2. The rules for connecting forest officers more closely with the Civil Administration were, as far as circumstances admitted, brought into force. The forest divisions were done away with, and the charges were made coterminous with the civil districts. But, owing to the facts that Mr. Ahmed Ali, Probationary Sub-Assistant Conservator, knows no English and to Mr. Prevost going on leave of absence in May 1885, each district could not be furnished with its own forest officer. On 1st September 1885 Mr. G. F. Taylor joined on transfer from the Central Provinces, and Mr. Mansukh Rai, from the Punjab, joined in August. These additions allowed of five out of six districts being put each under a forest officer. The sixth district, Buldana, was placed under the care of the forest officer of Basim District.

3. During part of the year the civil officers of the Wun District were in charge of the local forest office, and altogether there were several changes in the course of the year in all districts excepting Ellichpur, and these changes, though unavoidable, were unfortunate.

4. The new system of placing all the forests in a district under the Deputy Commissioner with a forest officer as his assistant in all forest matters has, on the whole, worked satisfactorily. The rules regarding the mode of communication between the Deputy Commissioner and his district forest officer were not acted up to fully in all districts, but this is a minor detail with which the Conservator did not interfere as long as work went on. In time all will settle down. There has been in places some little delay in correspondence passing, but this will be righted in time. The lack of an officer for the Buldana District was felt, for the essence of the scheme is that each district should have its own district forest officer under the Deputy Commissioner. Proposals to supply this want have lately been separately submitted.

5. Light grazing was again permitted in the reserves, and the issue and the use of passes in the reserves and district forests and grazing tracts was very carefully supervised. An improved grazing pass book was brought into use.

6. Much rain fell throughout Berar in December 1885, and this, by deferring the burning of fire-paths to a late period of the season when the high winds were blowing, rendered the work of fire protection one of more than ordinary danger and difficulty. In the Melghat, where nearly twelve inches of rain fell in December alone, the forest roads, which had just been repaired, were much cut up, and the export of timber and bamboos was interrupted at a critical time. The whole country-side became abnormally unhealthy, officers and men all suffered much from fever, and many of the Kurkus died. It is worth noting that, owing to this heavy rain the old leaves of many kinds of trees remained on them till far into May, and that teak seed was still hanging on the trees on the 15th May.

7. The protective and office establishments were recast; and, while the sanctioned expenditure was not exceeded, the average pay of foresters was raised without any decrease in the number, and provision was made for young men being employed who, after going through the course at the Dehra Dun Forest School, will hereafter be promoted to the rank of Ranger.

8. The department sent to Calcutta, for the Colonial and Indian Exhibition in London, an assortment of Berar fibres and of specimens of the dress, ornaments, weapons, domestic utensils, tools and agricultural implements, and of snares, &c., used in catching animals and birds used by the forest tribes.

9. The dress of the forest guards was assimilated throughout the circle, and arrangements made for putting the rangers and foresters into uniform. The men themselves pay for all clothing, dress and undress, but the Resident was pleased to sanction the purchase of eight swords and Sam Browne belts for the rangers. Hitherto these officers have had no recognized dress, a distinct disadvantage which will now be ended.

10. The Conservator was on tour just over eight months of the year, and, while he was unable to visit the Buldana District or the plain taluks of Ellichpur, inspected several reserves and woods and grazing tracts in the Amraoti, Basim, Akola, and Wun Districts, reporting separately on most of them. Specific proposals for the better working of some of the reserves were submitted, orders on which will, the Resident has intimated, be issued hereafter. All April 1885 was spent in the Melghat, and the Conservator went there again in March 1886, remaining in it till the 15th May.

11. He went carefully over a large proportion of the woods (babul buns) of Amraoti District and spent some days in the large grazing tract (75 miles in circumference) of Karanja. It will be necessary to make some alterations in the lists of woods, and the details will be worked out during 1886-87.

12. The heavy rains of December stopped the export of bamboos and timber for a time from the Melghat, and the revenue of these forests was also interfered with by an unusually large import of wood and bamboos from the Central Provinces. When, however, the effects of the soft weather had passed off, the exports from the Melghat forests for February and March rose far above the average, and the total falling off of revenue in the Ellichpur District, which threatened at one time to be very serious, was far less than had been feared. The financial results of the whole circle for the year were good. The gross revenue, 3,20,047 rupees, and the gross expenditure, 1,59,035 rupees, were the highest on record, while the surplus, 1,61,012 rupees, was more than 20,000 rupees above that of 1884-85, and 11,214 rupees above the average surplus of the last ten years.

CHAPTER I.—Area and Boundaries.

13. The subjoined statement shows the Area of forest lands :—

Description of Forests.	Area in square miles.				Percentage of forest area to area of Province.
	On 1st. April 1885.	Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1886.	
	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.	
State Reserves ..	1,108	2	...	1,110	6·9
District Forests ...	436	...	..	436	2·7
Unreserved Forests ...	2,820	9	33	2,796	17·4
Total ...	4,364	11	33	4,342	27·0

14. The apparent addition to the State reserves is due to a rectification of the area of the Gahuli reserve, after allowing for the exclusion from the Gugumal reserve of 117 acres taken up for the new roads that are now being made in that part of the Melghat by the Department of Public Works. A few acres were added in the district forests. In the unreserved forests the addition of 9 square miles is due to inclusion of land thrown up by cultivators, while in the Wun District 33 square miles were given out for cultivation and other purposes. The Wun District lacks population, and ere long much of the unreserved forest will be utilized for other purposes. The same thing will probably be the case eventually in parts of Basim District.

15. In the Bairagarh reserve intermediate pillars were put up where the original pillars were too far apart. The numbering on some of the pillars requires to be looked after. In the Gahuli reserve of Basim six new pillars were put up where roads entered the forest. In the Wun and Basim Districts the pillars round several of the reserves are in some places too far apart, and the officers in charge were requested to rectify this. The forest boundary marks were in general found to be in good order. But, as noted in the report for 1884-85, the survey marks where fields touch forests are often in bad order. Provision was made in the budget for 1886-87 for the repairing of these marks. As all forest boundary lines are also used as fire-paths they are cleared well every year.

CHAPTER II.—Surveys, Working Plans and Annual Plans of Operations.

16. The Officiating Superintendent of Forest Surveys has furnished the following note of the work done by his branch :—

(1.) The survey of the Melghat, which was commenced in 1883-84, was continued in 1885-86. The survey parties took the field early in November and returned to recess quarters at the beginning of June.

(2.) The establishment was divided into three topographical field parties, a triangulating and traverse party, and a central computing office. Each of the topographical detachments was under an experienced assistant, and the triangulation, traversing, and computations were under the immediate supervision of the Officiating Superintendent of Forest Surveys, who also directed and controlled the entire survey.

(3.) The two topographical detachments working on the scale of 4″ = 1 mile completed portions of sheets Nos. 12, 17, and 18 chiefly in the Pergannah of Katkumb, whilst the third party working on the scale of 2″ = 1 mile completed sheet No. 10 and portions of sheets Nos. 11 and 14 comprising chiefly lands in the forest reserves of Gugumal and Bairagarh. Triangulation and traversing were carried on in sheets Nos. 7, 8, 9, 12, and 13.

(4.) The total area topographically surveyed in the Melghat during 1885-86 is 403 square miles; of this area, 241 square miles were surveyed on the scale of 2″ = 1 mile, and 162 square miles were surveyed on the 4 inches scale. An area of 410 square miles was triangulated with an average of one trigonometrical station per square mile; 209 linear miles of traversing were run over an area of 458 square miles, fixing 1,953 traverse stations. Throughout the area topographically surveyed, levelled contours were laid down with the Tangent scale clinometer at vertical distances of 300 feet. On the 4″ scale survey all demarcated fields were surveyed and a record of holdings was prepared, as was done during

the previous season. In the forest tracts which were surveyed on the 2″ scale the usual record of forest growth was prepared. A specimen sheet of the villages of Gowlkhera and Silona is attached hereto, and an index map illustrating the progress of the Melghat survey is also appended.

(5.) For the field season of 1886-87 a sufficient area is triangulated and traversed in advance, and the village boundary and field demarcation is also well ahead of the topographical survey.

(6.) The present demarcation of the Central Provinces Berar boundary is in places faulty, inasmuch as the boundary, as laid out on the ground, does not always accord with the settlement map record of the Central Provinces; the matter has been brought prominently to the notice of the Commissioner with a view to having the differences settled by an early date. Until the differences on the Provincial boundary are finally disposed of, it will not be possible to pass through the press any sheets which contain portion of this boundary. Two of the sheets (Nos. 19 and 20) are now ready for press, but they must remain over for the present.

(7.) The maps on the 4″ scale of the villages of Gowlkhera, Silona, Belkhera, Gondwihir, Masona, Najarpur, and Panri, have been published, and copies have been issued to the Civil and Revenue authorities. A map of the Ellichpur taluk on the scale of 1″ = 1 mile has also been passed through the press. Two congregated village maps, as well as the maps of the Chikalda reserve on the 4″ scale, are ready for press, and the drawing of two other sheets is finished. All these maps will be passed through the press within the next few months. Sheets Nos. 19 and 20 are also ready for press, but they cannot yet be published for reason previously stated. The drawing of sheets Nos. 10, 14, 15, and 16 on the scale of 2″ = 1 mile is in progress.

(8.) The greater part of the survey establishment—both European assistants and Native surveyors—suffered much from fever; nevertheless all worked cheerfully and well.

17. The existing maps of the forests are very poor, and those of the Melghat especially are often incorrect. The department hopes that better maps may be available ere long. The district map (Ellichpur) referred to in para. 58 of the report for 1884-85 is still under preparation. It has been delayed by various causes.

18. Although there are as yet no working plans for the Berar forests in the sense now usually attached to those words, it would be a great mistake to think that the forests are neglected or worked at haphazard. Everywhere fire protection is enforced; the reserves are carefully worked and illegal felling is very uncommon, and grazing and cutting of grass, wherever allowed, are well regulated. In the forests in the plains seed is sown yearly in selected places to aid reproduction, and much bamboo seed will be sown in the current year. This valuable forest product is unfortunately very rare now outside of the Melghat in Berar, where the southern forests all require to be left alone for years to come to recover themselves. In the Melghat the comfort and contentment of the forest dwellers has been gained while forest management has been well cared for. The Kurkus are our good friends, and fire conservancy is a success. The cutting over of trees sold in the reserves is done departmentally, while that of bamboos is carefully supervised. No forest officer who visits these forests can fail to see evidence on all sides of the care and attention that have, in the last 18 years, converted these once over-worked and neglected lands into conserved forests, with soil well covered with humus and carrying vast numbers of young trees and bamboo clumps full of promise for the future. Roads have been made, wells dug, and tannahs built. Many of the conditions that must enter into any rational working plan already exist in Berar.

19. It has already been said that proposals for certain specific operations in some of the southern forests in Berar have been submitted. In March 1886 the Conservator, in company with Mr. Ballantine, began to collect data for a working plan for two blocks (measuring some 80 square miles) of the Bairagarh forest in the Melghat. By the middle of May the trees on 19 selected areas, containing 320 acres, had been counted and classified. Inquiries into the rate of growth by counting the rings on some 300 sections from different trees are now in progress, and a report will be submitted later on. Annual plans of operations are, of course, in use throughout the circle.

CHAPTER III.—Protection and Improvement.

(1)—*Establishments.*

20. The controlling staff at the close of the year was—

1 Conservator.
1 Deputy Conservator.
1 Officiating Deputy Conservator.
1 Assistant Conservator.
3 Sub-Assistant Conservators, two of whom are on probation.

But one of the Sub-Assistants knows no English. He is, therefore, not ordinarily available for the charge of a district, and so far the work of the department has been hampered, as two districts, Basim and Buldana, had to be placed under one officer. On the other hand, the services of this probationary officer are most valuable in the Melghat, where he has served for years as forester and ranger. The matter has been separately reported with the view of an addition to the controlling staff. The subordinate establishments were recast during the year, and consist now of 8 rangers, 45 forosters, 25 naka karkuns, and 97 forest guards and peons. The out-door establishment has been mobilized so as to admit of its transfer, as work demands, from district to district.

21. Two men—one a forester in the service and one a new man (Athawale)—were selected to join the Forest School at Dehra Dun in July 1886, but Athawale was dismissed for bad behaviour, and the forester has asked for a year's grace to enable him to make himself better acquainted with mathematics before he goes up.

(2)—*Legislation and Rules.*

22. Remained unaltered during the year.

(3)—*Breaches of the Forest Law.*

23. Full details will be found in form No. 50. They are summarized in the following table;—

Districts.	Prosecutions.				Convictions.	Aquittals.	Cases pending at close of 1885-86.
	Pending from 1884-85.	New of 1885-86.	Total for 1885-86	Concluded in 1885-86.			
Ellichpur	...	129	129	129	110	19	...
Amraoti	1	120	121	120	102	18	1
Akola	...	47	47	46	37	9	1
Basim	1	34	35	35	30	5	...
Buldana	...	62	6	61	43	18	1
Wun	...	30	30	30	26	4	...
Total	2	422	424	421	348	73	3

24. The proportion of convictions to prosecutions was 82·66 per cent., or 2·14 worse than last year. 65 of the offences were committed in the reserves, and 357 in other forests and at the nakas.

25. One naka karkun, a man of several years standing, was convicted of having allowed wood to be felled within sight of his naka and to be converted into charcoal, which he passed through his naka (or custom-house) without payment. He was sentenced, on conviction, to one day's imprisonment and 400 rupees fine.

26. In Amraoti District 120 cases arose in 1885-86, against 46 in 1884-85. The increase is due almost entirely to illicit felling in the woods (babul buns).

Several cases were noticed by the Conservator during his tour, and the foresters and village patels were stirred up considerably.

The fines inflicted by Tahsildars are often very light and hardly deterrent. There was also an increase in Buldana District of offences in district forests, but the percentage of convictions to prosecutions was not as good as in other districts.

(4)—*Forest Fires.*

27. The subjoined table shows the results of fire protection. These were not as good as in 1884-85 owing chiefly to fires in the Wun District, where 23,508 acres were burnt against 10,788 acres of failures in 1884-85. There were special difficulties everywhere this year owing to the very heavy and general rains of December 1885. These kept the grass green for a long time, and the fire-paths had to be burnt in March, when the high and dry winds prevail, and in some places the burning of fire-paths was stopped as the risk was so great. But there is reason to believe that some of the worst fires in Wun District were due to the instigation of servants of the department themselves.

28. The Conservator has directed that, on a fire occurring the locality must in future, except under very exceptional circumstances, be inspected by the District Forest Officer, and, after being measured up, the area burnt is to be entered on the forest map. The map showing the locality, date, and extent of the fire is then to be sent to the Conservator with a full report, and the particulars will be entered on his maps. This will admit of a better record being kept than hitherto. It is very necessary that the exact locality in each forest of every fire should be recorded and shown on the maps from year to year. In the Wun District Mr. Mansukh Rai has done his work well and carefully inspected and reported on 12 out of 14 fires. The Superintendent, Forest Surveys, has been asked to supply more copies of the maps of the reserves.

29.

Districts.	Years.	Protected successfully.	Failures	Cost.
				Rs
Ellichpur District ...	1885	386,989	260	1,802
	1886	386,581	551	2,757
Amraoti District .	1885	13,071	...	231
	1886	11,771	1,300	307
Akola District	1885	2,276	...	
	1886	2,276	...	
Basim District	1885	54,562	2,402	485
	1886	53,981	2,983	340
Buldana District ...	1885	58,479	1,230	434
	1886	59,700	..	256
Wun District	1885	139,368	10,788	2,107
	1886	126,648	23,508	2,271
Total ..	1885	654,745	14,680	5,059
	1886	640,966	28,342	5,031

30. The area placed under protection was smaller by 117 acres (see next para.), but the failures were greater by 13,662 acres owing to the increases in the Wun District. The cost of protection for the whole province was more by 872 rupees due to the difficulty in burning off the fire lines which, keeping green for long, had in places to be burnt two or three times over. The cost per protected acre was 1·77 pies or, say, five rupees fourteen annas per square mile against five rupees in 1884-85.

31. In Ellichpur District the number of acres under protection was less by 11·7, that area having been taken out of the Gugamal reserve and made over to the Department of Public Works for the new road from Dakna to the low

country. The Raipur block of the Bairagarh reserve again escaped all fires, but there were two fires in Bairagarh—one of 90 acres at Kolkaz caused by lightning, the second, of 13 acres, in an old field at Bhopla. Its origin could not be traced and very little harm was done. In the Gugamal reserve 448 acres were burnt along the southern boundary caused by a fire which entered the reserve from outside across an imperfectly-burnt line.

32. In the Amraoti District two fires occurred in the Amraoti hills rumnas: one burnt 500 acres near Bankhair Khurd, and one 800 acres near Pohra. The rumnas are constantly resorted to by the people from Amraoti for grass, and unfortunately the origin of neither was traced.

33. The Basim and Buldana Districts were under one officer. In the former there were two fires in the Penganga forests burning 2,373 acres, and one burning 610 acres in the Gahuli forest, which was constituted a reserve in 1884-85. The causes of the fires in Penganga are still under enquiry. The Buldana reserves escaped all fires.

34. In Wun there were in all 14 fires, burning 23,508 acres against 10,788 in the preceding year. 7,500 acres were burnt in five fires in the Kelapur reserve, and there is reason to fear that these were due to the forest subordinates themselves. The ranger (the man alluded to in the next paragraph) in charge had been exceedingly careless in clearing his fire-paths, and one of the head guards was also much to blame for great negligence in his beat. 7,015 acres were burnt in three fires in Gondwakri: and two fires, one of 60 acres only, burnt 3,018 in Khorad forest. This last is a very poor reserve, consisting chiefly of grass and some salei trees. Two of the fires in Gondwakri burnt 6,765 acres between the 12th and 14th April. Several gun licenses were issued last year by the Deputy Commissioner to ryots in the neighbourhood of Khorad and of Gondwakri to protect their crops, and, though there is no proof forthcoming, it is suspected that these fires were due to shikarries entering the reserves. The other four fires were two in Kinwat, one at Twisala, and one at Anjankher.

35. A ranger, formerly a vernacular clerk, was, on 27th October 1884, promoted to be a fourth-grade ranger on Rs. 60 a month. He has, on three separate occasions since the present Conservator took charge in 1885 of the Berar forests, asked for promotion and been refused it. The Conservator had reason to find great fault with the manner in which he had cleared his fire lines in Twisala and Kelapur and failed to pay coolies their dues. In April 1886 he suspended him and ordered his prosecution for criminal breach of trust by a public servant. The day the man made over charge of Kelapur forest a fire occurred, burning 4,250 acres.

36. The Kinwat forest is surrounded on three sides by Hyderabad, and up to the 31st March 1886 was under the charge of the Wun Forest Officer. On the 1st April it was transferred to the Basim Forest Officer, being in the Basim District. It is somewhat inconveniently situated for inspection from either Wun or Basim. The Conservator visited it in January 1886 and stayed in it eleven days. He found that it was insufficiently protected from fire, the fire-paths being too few. It was too late to cut any more then, but he pointed out what should be done next season. His fears were unfortunately realized, for later on in the year a bad fire went through the middle of the large insufficiently-protected block. The forest is in a remote corner of the Basim District, and it is difficult to get labour in the neighbourhood, which is very thinly peopled. But, making all allowances for this, the Basim Officer has been directed to inspect the forest thoroughly every year and to protect it better next season, and this must be done. The ranger in charge had hitherto done well and was promoted last year. But he this year showed much apathy when fires did occur, and was fined and degraded one step for six months.

37. The area of woods, rumnas, and grazing lands that escaped fire without any special means being taken to protect them is the same as that for last

year. No fires occurred in any of the woods. Of 16,450 acres of rumnas in Wun District, 8,250 were burnt; this verifies the proportion, one-half, assumed last year. The area of grazing lands is large—1,335,169 acres, and two-thirds are again assumed to have escaped, being by no means a large assumption. The taluk foresters in Wun District reported on these, but the Conservator does not accept their statements, as these men have too much other work to enable them to be accurate in this particular. The Deputy Commissioners of districts will be requested to direct all patels to report any fires that may occur next season in the grazing lands. They can be but few, for these lands are so bare by the hot weather that there is little left for any fire to burn.

				Acres.
Woods	...	...	...	14,532
Rumnas	...	...	...	20,592
Grazing lands	...	...	...	890,110
			Total ...	925,234

(5)—*Grazing and Fencing.*

38. Grazing in the Melghat was allowed under the same rules as heretofore. In the Amraoti and Wun Districts a general grazing tax is levied in lieu of the old system of selling the grazing lands to contractors. In Akola, Basim, and Buldana Districts the auction system was continued, but proposals were laid before the Resident for the introduction into these districts of the general grazing tax, a system which will find favour with the people, who at present are at the mercy of the men who buy the right to sublet the grazing.

Light grazing in the State reserves of South Berar was again allowed under careful supervision and with no bad results.

39. The total number of cattle that paid the department directly for grazing on lands included within the forest area is given in the following table:—

Districts.	Camels.	Buffaloes.	Cows and bullocks.	Sheep and goats.	Total.
Ellichpur	58	16,952	95,724	48,794	161,528
Amraoti	20	34,506	138,395	70,150	243,071
Akola	...	83	1,291	...	1,374
Basim	...	865	15,806	...	16,671
Buldana	...	1,387	13,471	...	14,858
Wun	..	48,753	309,294	94,348	452,395
Total ...	78	102,546	573,981	213,292	889,897

There was a falling off in cattle grazed in the Melghat unreserved forests owing probably to more grazing being available in the plains after the heavy rains of December. In all the other districts, notably in Wun, the check over grazing was more carefully enforced and the numbers rose.

40. The Executive Engineer, East Berar Division, has furnished the following statement of progress made in works for storing water for cattle:—

Names of Tanks.			Remarks.
Pohora in Amraoti Hills		...	Completed in March 1886.
Ghatang in Ellichpur District		...	Do, do.
Baramtana	do.	...	Do. in 1885-86.
Tatona	do.	...	Do. do,
Telghat	do.	...	Nearly finished.
Tekra	do.	...	Will be completed in 1886-87,
Postalai	do.	...	Not yet begun.

No fencing was done anywhere,

(6)—*Natural re-production.*

41. There is little to be added to the remarks made last year. The Conservator very carefully inspected several of the reserves in Basim and Wun Districts and submitted separate reports on them. Everywhere natural production is healthy, allowance being made for the very poor soil in parts of the forests. Fire protection, immunity from the axe, and carefully-regulated light grazing during the rains in the reserves south of the Melghat, combined with broadcast sowing of seed, is telling, and will in time cover the land with much tree vegetation. In most of the districts, however, there is now a great scarcity of bamboos, and measures were taken to procure seed and to sow it in selected plots during 1886-87. A large quantity of seed has been got in, chiefly from other circles, and the operations undertaken will appear next year under cultural operations.

(7)—*Artificial re-production.*

42. Plantations.—*Nil.*

(8)—*Cultural operations.*

43. In the Chirodi reserve among the Amraoti hills, 450 young bamboos were planted out along nalas, and 340 of them were thriving at the close of the year. While 50 out of the 750 mango trees existing last year round the Karanja tank in Amraoti District died out, survey field No. 175 was added to the area, and 1,250 mango trees were successfully raised and were doing well on the 30th March 1886. The Yoota bun in Murtazapur taluk, a plot of land with good soil, was selected to be planted up during 1886-87 with teak, mango, mohwah, and bamboos. Altogether 782 acres were sown broadcast or planted up during the year.

In the Loni Bhongaon reserves in Akola District, 25 acres were sown with babul seed, which germinated well and looked well at close of the year.

In the Geru-Matergaon, Amdari, Ghatbori, Penganga, and Rui reserves, in Buldana and Basim Districts, very large quantities of seeds of various trees were sown broadcast over 2,859 acres.

In Ellichpur District 750 acres in the Gugamal reserve were sown broadcast and thickly with teak seed, and a quantity of hirda seed (*Terminalia chebula*) the myrobalan, was collected to be sown in the Bairagarh reserve in 1886-87. The localities where the seed will be sown were selected by the Conservator in April 1886.

In the whole of the Berar there were thus 4,416 fresh acres operated on, chiefly by seed sown broadcast.

(9)—*Communications and Buildings.*

44. In the Melghat the Sembadoh-Chikalda road, a most useful work, was completed, the cost for the year being 7,060 rupees.

In the Bairagarh reserve Rs. 1,107 were spent on repairs to the roads from Sembadoh to Biba, Dhasipati to Pili, Raipur to Patia, and on the Makla road. In Gugamal reserve Rs. 1,777 were spent on the repairs done to 50 miles. Owing to the heavy rains in December, repairs had in many places to be done twice over during the season.

45. The tannahs, rest-houses, and nakas throughout the Melghat forests and Ellichpur District were repaired and kept in good order at a cost of Rs. 509, and new tannahs built at a cost of Rs. 50 each at ten stations. The Wagholi naka house was unfortunately burnt down, and the naka at Kamod being transferred to Pingli, two new naka houses were put up at these places at a cost of 65 rupees.

46. The Department of Public Works completed the new large well at Sembadoh at a total cost to the Forest Department of 897 rupees. The Forest Officer repaired the wells at Surwar and Sewaji, and sank a new one at Jhiri naka, where water is much wanted, but without success. A new cattle-pound was put up at Sembadoh. At Ellichpur Cantonment, the chief market for the

Melghat timber and bamboos, a wood bazaar compound was enclosed by the civil authorities. The Forest Department contributed Rs. 119, or half the cost, towards this work on condition that none but Kurkus should be allowed to keep their unsold wood in the enclosure from week to week. It was necessary to do this to protect these forest dwellers against the wood merchants of Ellichpur, who formed a ring and forced the Kurkus to sell at low rates, while the public gained nothing, all profits going to the middlemen. Now that the Kurkus can leave their unsold wood in safety till another market-day comes round the operations of this wood corner have been checked.

47. In Amraoti District petty repairs were effected over 12 miles of roads in Amraoti hills and rumnas.

48. In Basim and Buldana Districts Rs. 106 were spent in repairing roads in the reserves. Two new tannahs—one at Rui and one at Gahuli reserve—were built, and petty repairs done to eight old tannahs.

The Geru-Matergaon reserve in Buldana District is in great need of roads to make it accessible, and this work will have to be provided for shortly.

49. In the Wun District petty repairs were done to five tannahs in all.

CHAPTER IV.—Yield and Working.

Removal of produce by purchasers.

50. In the Melghat 642 trees of various kinds, all badly grown, were cut over carefully flush with the ground at a cost of Rs. 71 and a return of Rs. 895. The wood was sold to purchasers on the spot who removed it at their own expense. The unfavorable weather in December and the large import of wood from the adjoining districts of the Central Provinces, already alluded to in para. 12, led to a decrease in the number of trees felled and in the quantity of wood taken from the unreserved forests through the nakas.

51. Dues were paid at the nakas on the following quantities of forest produce removed from the Melghat:—

Produce.		Bairagarh Reserve.	Gugumal Reserve.	Unreserved Forests.	District Forests Melghat.
Teak	c. ft.	8,314	...	131,065	...
Other woods ...	"	101	...	136,541	...
Firewood ...	"	28	...	153,297	630
Charcoal ...	"	...	...	114,212	168
Bamboos ...	No.	866,623	515,486	1,256,549	...
Grass ...	tons.	...	...	2,218	...
Lac ...	"	⅓	...	12½	...
Teak leaves ...	"	...	...	263	...
Roots and fruits ...	"	50⅓	...	654¼	...
Gums ...	"	...	...	3½	...
Miscellaneous ...	"	...	...	11⅓	...

There were decreases in timber of all kinds, 40,761 cubic feet: in grass, 297 tons; in lac rather more than one ton; 44 tons of teak leaves; 150 tons of roots and fruits. The decrease in timber has been already accounted for; the falling off in other articles is due chiefly to the bad weather and to the very much smaller crop of myrobalans on the trees as compared with that of the preceding year.

The export of bamboos was in numbers less by 528,368, and 417,730 less than that of 1883-84. There being a general impression that the export of bamboos was more than the annual reproduction warranted, the royalty was raised from Re. 1 to Rs. 1-8-0 per hundred with effect from the 1st November 1885. As the number taken was smaller than in either of the two preceding years, it is said that the enhancement of the royalty had some effect on the export.

But the fact that the heavy weather of December and its effects on the roads, soil, and health of the Melghat undoubtedly checked all exports makes it difficult to speak with any confidence on this point. The Conservator is of opinion that the enhancement of the royalty had but little effect on the trade. Whether the demand for bamboos taken from the reserves is greater than the annual reproduction was a question taken up by the Conservator and Mr. Ballantine while engaged in the Bairagarh forest on valuation surveys connected with a working plan for two of its blocks. The results will be fully reported hereafter when the plan is submitted, but it may be here said that the reproduction of bamboos in Bairagarh is very good and that it is quite equal to the demand, while the quality of the new stock has improved vastly since fire conservancy was introduced.

There was an increase in the export of certain articles: under firewood and charcoal, 12,744 cubic feet, and of about two tons in gums, and about one ton in miscellaneous.

52. The following table shows the quantities of taxed products removed in the Amraoti District on passes granted by the District Forest Officer, exclusive of quantities removed by people who paid for the wood, grass, &c., taken through the nakas which were farmed out to contractors at Karanja and on the roads leading from the Amraoti hills to Amraoti town. The contractors do not supply information on these points. During 1884-85 these nakas were farmed for a part of the year only; during 1885-86 for the whole year. Comparisons therefore cannot be drawn. But, as Amraoti and Karanja towns were well supplied, it is reasonable to suppose that the total quantities removed were about the average:—

Timber	cubic feet	305
Firewood and charcoal	,,	11,337
Grass	tons	1,641
Miscellaneous	,,	10

53. The South Berar Division is now broken up into the three district charges of Akola, Basim, and Buldana, and the removals of produce are shown separately for each.

54. *Akola District.*—Of firewood, 17,192 measured cubic feet were removed from the reserves, but, in addition to that, the babul trees standing on 36 acres of reserves and on 227 acres of district forests were sold standing by public auction.

55. For Basim District the figures were—

Timber	cubic feet	112
Firewood	,,	8,174
Bamboos	No.	100
Grass	tons	317

For Buldana District the returns are—

Timber	cubic feet	700
Firewood	,,	6,697
Grass	tons	507

The quantity of grass removed was very much less than in 1884-85. It is true that the sums paid for grazing were higher, but the Conservator is by no means satisfied that much of the great decrease, 1,556 tons, is not due to want of care in supervising what was actually taken out of the forest area.

In Wun District the quantity of grass taken rose considerably.

56. The following were the quantities of produce removed in the Wun District:—

Timber	cubic feet	3,640
Firewood	,,	1,204
Charcoal	,,	84
Grass	tons	3,963
Bamboos	No.	76,540

Compared with 1884-85, the demand for timber and firewood rose by 1,670 cubic feet and about 1,050 cubit feet respectively, while of bamboos 5,05[illegible] fewer were taken. The demand for grass, chiefly for fodder, rose by 2,222 tons,

and this while, as already stated in a a former paragraph, the sums paid for grazing throughout the district were larger for the year. The supervision of the removal of grass from the reserves, all of which was sold this year on passes, was very close.

Free grants of forest produce.

57. In the Wun District 3,060 teak goles, 531 of other kinds, and 2,200 bamboos were granted free.

58. Summary of produce removed from the forests :—

		1884-85.	1885-86.	
Teak ..	... c. ft.	164,362	144,136	
„ goles	No.		3,060	(Free grants.)
Other wood	... c. ft.	163,443	136,642	
„ goles	... No.	...	531	(Do.) .
Firewood	... c. ft.	352,590	198,559	
Charcoal	... „	...	114,464	
Bamboos	... No.	3,248,626	2,717,301	Including free
Grass ...	...Tons.	10,238	8,641	grant of 2,000.
Lac ...	... „	13	12½	
Teak leaves	... „	307	263	
Fruits	... „	855	705	
Gum ...	... „	1½	3½	
Miscellaneous	... „	91	21½	

Firewood and charcoal are discriminated for 1885-86. It will be noticed that, with the single exception of gum, there is a decrease, the removals of produce as set forth above being lower than they were in 1884-85. But, remembering what has been said in para. 52 with reference to the farming of the nakas at Amraoti and Karanja, it is probable that the quantity of fuel in both wood and charcoal actually removed was really more than in 1884-85. And, although the falling off in the Buldana District alone accounts for almost the whole quantity short in grass removed, there was a large quantity of grass taken through the Amraoti and Karanja nakas which does not appear in the summary above, and the actual quantity of grass removed may be also taken as more than in 1884-85. Looking at the last year's report, it will be seen that the quantities of timber of all kinds, firewood and grass, were less in 1884-85 than in 1883-84. Part of 1884-85 was the Hindoo Sinhast year, and that unlucky period extended itself over more than half of 1885-86. Remembering that the bad weather of December 1885 told very heavily against the exports from the Melghat up to the end of January 1886, it may be fairly assumed that the removals of forest produce in 1885-86 were lower, owing to extraneous causes, than they would otherwise have been, and, had the weather not been so unfavourable, the exports would have been quite up to, if not more than, those of 1884-85.

CHAPTER V.—Financial Results.

59. The financial results are shown in forms Nos. 58 and 59.

The gross revenue was got in from the following sources :—

	Rs.
Timber	71,872
Firewood and charcoal	26,046
Bamboos	28,736
Grazing and fodder grass	1,72,254
Other minor produce	15,235
Confiscated, drift, and waif wood	1,642
All other sources	4,262
Total ...	3,20,047

or Rs. 26,599 *more* than in 1884-85.

60. This summary shows a larger revenue with an *apparently* smaller out-turn of produce. The following is the explanation :—Under timber, bamboos, and other minor produce, the out-turn of produce was less, and the revenue

followed it, being under each head Rs. 3,649, Rs. 4,033, and Rs. 3,309 respectively less than in 1884-85. It has been already shown that the crops of fruits, &c., were far smaller last year than in 1884-85, and the bad weather in the Melghat, the chief forest district in Berar, accounts for almost the whole of the falling off in timber and bamboos. The remarks made on the Amraoti District nakas and on the sales of standing wood in Akola District explain how the money returns under firewood and charcoal, better in 1885-86 by Rs. 10,062, are high, while the out-turn of produce cannot be given in detail, and so seems to be lower. The greater care taken in supervising grazing passes and the larger number of cattle grazed everywhere have raised the revenue under the head "grazing and fodder grass" by Rs. 24,683, while, of course, grazing cannot be shown under quantities of products removed. There was a small increase, Rs. 342, under confiscated, drift, and waif wood. The increase under "all other sources," Rs. 2,502, is due to the sale, for Rs. 3,000, of the Conservator's elephant, counterbalanced by an equal sum spent in the purchase of a new animal.

61. The expenditure was—

	Rs.
A. Conservation and working	63,186
B. Establishment	95,849

or Rs. 6,521 more than in 1884-85; the expenditure under A. being Rs. 14,502 more, and under B. Rs. 7,981 less, than in that year. The transfer from B. III. f. to its proper head, under A. II., of the percentages paid to patels of villages for collecting fees on grazing outside of the reserves; the purchase of an elephant for the Conservator and of a large number of grazing pass books are the chief items in the increase under A. The charges under B. were relieved by transfer of the percentages paid to patels, and would have been lower but that the establishment of officers was increased by the transfer of Mr. Mansukh Rai from the Punjab and by the promotion of Mr. Ahmed Ali from Ranger to Sub-Assistant Conservator on probation. There was also an increase under travelling allowance, as much more inspection work was done by all upper officers.

62. The revenue and expenditure of the different classes of forests were—

Class of Forests.	Revenue.		Expenditure.		Surplus.		Deficit.	
	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
State Reserves ...	47,271	54,331	63,793	62,470	...	...	16,522	8,139
District Reserves.	55,596	1,72,605	26,934	45,049	28,662	1,27,556	...	...
Unreserved Forests ...	1,90,581	93,111	61,787	51,516	1,28,794	41,595	...	..
Total ...	2,93,448	3,20,047	1,52,514	1,59,035	1,57,456	1,69,151	16,522	8,139
			Deduct deficit ...		16,522	8,139		
			Net surplus ..		1,40,934	1,61,012		

The net surplus was Rs. 20,078 *more* than in 1884-85.

63. The following statement shows the financial results by Forest Districts :—

		Revenue.	Expenditure.	Surplus.	Deficit.
		Rs.	Rs.	Rs.	Rs.
Direction Office		3,001	26,955	...	23,954
Ellichpur District.	District Forest Office....	153	17,662	...	17,509
	State Reserves ...	19,326	21,597	...	2,271
	Unreserved Forests ...	91,966	27,150	64,816	...
	District Reserved Forests.	3,300	568	2,732	...
		1,14,745	66,977	67,548	19,780
Amraoti District..	District Forest Office ...	165	7,225	...	7,060
	Amraoti Hills Reserves..	14,310	1,921	12,389	...
	District Reserved Forests	42,866	4,605	38,261	...
		57,341	13,751	50,650	7,060
Akola District .	District Forest Office...	20	2,772	...	2,752
	State Reserves ..	2,311	609	1,702	...
	District Reserved and Unreserved Forests...	23,758	3,576	20,182	...
		26,089	6,957	21,884	2,752
Basim District .	District Forest Office ...	93	12,319	...	12,226
	State Reserves .	5,696	3,630	2,066	...
	District Reserved and Unreserved Forests ..	18,181	1,376	16,805	...
		23,970	17,325	18,871	12,226
Buldana District...	District Forest Office .	...	...	...	...
	State Reserves ...	6,190	2,768	3,422	...
	District Reserved and Unreserved Forests ...	23,158	3,275	19,883	...
		29,348	6,043	23,305	...
Wun District ...	District Forest Office ...	4	6,166	...	6,162
	State Reserves ...	5,353	7,579	...	2,226
	District Reserved and Unreserved Forests .	60,196	7,282	52,914	...
		65,553	21,027	52,914	8,388
	Total ..	320,047	1,59,035	2,35,172	74,160
			Deduct deficit ...	74,160	
			Net Surplus ...	1,61,012	

It may be noticed here prominently that Rs. 17,120 are paid annually in the Ellichpur District (Melghat Forests) to certain Rajas as rent of leased forests

A. V

64. The receipts and charges of the year exhibited under budget heads for 1885-86 are—

Heads.	Receipts.		Charges.	
		Rs.		Rs.
I. Departmental timber operations ...	I.	...	I.	
II. Other revenue	II, III, and V.	3,20,047	II, III, V, IX, 75% VI. and B.	1,13,006
III. Formation, protection and improvement of forests	...	...	VII, VIII, 25% VI and B.	46,029
	Total ...	3,20,047	Total ...	1,59,035

CHAPTER VI.—General Remarks.

65. The new Forest Law for Berar was received back from the Resident in April 1886. Under it all lands now known as reserves, woods, rumnas, and grazing lands, together with many of the babul buns in Akola, Buldana, and Basim Districts will appear as *State Forests*. The revision of the lists and the drafting of the subsidiary rules under the law will be work for the current year.

66. A letter which appeared in October 1885 in an English newspaper, the *Morning Post*, on the alleged sugar-producing qualities of the Mohwa flower (*Bassia latifolia*) led to some of the flowers being sent for analysis to the Rosa Sugar Works. The result was unsatisfactory, showing that the Mohwa cannot compete with cane in producing sugar.

67. A proposal by the Deputy Commissioner of Ellichpur to introduce saw machinery into the Melghat forests was submitted through the Conservator to the Resident, who has called for further information, which will be supplied after the submission of the preliminary working plan for two blocks of the Bairagarh reserve.

68. A proposal to farm the nakas along the line of the Melghat hills was submitted to the Resident. It was approved and orders received after the close of the year now reported on. The nakas will be put up to sale in time enough to admit of their being worked by the contractors from the 1st November 1886.

69. The Makla observatory in the Melghat was for the first time inspected by a meteorological officer, Mr. Chambers, the Reporter for Western India. He reported favourably on it and on the observer in charge, who is a Kurku trained by Mr. Ballantine. His report has been sent for perusal to the Meteorological Reporter to the Government of India. The registers of rainfall in Berar are given in Appendix B.

70. The Forest Dispensary at Chikalda, all expenses connected with which were, up to the end of March 1886, debited to the Forest Budget, was on 1st April 1886 made over to the Medical Department.

71. The Conservator desires very prominently to bring to notice Mr. Ballantine's continued good work in the Melghat forests. Mr. Mansukh Rai, Probationary Sub-Assistant Conservator, who is in charge of the Wun District, and who joined in Berar in August 1885, is highly spoken of by the Deputy Commissioner of the District, and the Conservator fully endorses that opinion. In Akola District Mr. Russool Khan, Sub-Assistant Conservator, has done well as District Forest Officer. He is a painstaking, careful officer. Among the subordinates, Rangers Krishnaswamy, Bhukan, and Misripersad and Forester Jagmohan, all in Ellichpur District, and Forester Nizam-ud-din in Wun District, have done particularly well; while, among the office clerks, Ganesh Narayan, now Head Clerk, Conservator's Office, in place of Trimbak Amrut, pensioned

Luxmon Narayen, Ellichpur District, and Rango Bapuji, Third Clerk, Conservator's Office, have done good work.

72. The out-door establishment was during the year put on one general list, and this will facilitate promotions and transfers when necessary. The office establishments were also brought on to a general list.

73. The Conservator begs to thank the Deputy Commissioners of Amraoti, Wun, Akola, Basim, and especially of Ellichpur, for the help given him during the past year, during which a new system of administration was introduced.

G. J. VAN SOMEREN, LT.-COL.,

Conservator of Forests,

Hyderabad Assigned Districts.

APPENDICES.

FORESTS.

ANNUAL FORM No. 49.—*Area of Reserved Forests*, 1885-86.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April, 1885. Acres.	Area on 1st April, 1885. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 1st March 1886. Acres.	Area on 1st March 1886. Equivalent in square miles.	No. and date of Notification of addition or transfer.	Remarks.
			DEMARCATED STATE RESERVES.								
Ellichpur District	Bairagarh Range.	Ellichpur District...	Bairagarh Reserve ...	272,049	425	...	...	272,049	425		
	Gugamal Range.	Do. ...	Gugamal do. ...	115,200	180	...	117	115,083	180	Hyderabad *Residency Orders* of 15th January 1886.	For a road in construction by P.W.D.
	...	Do. ...	Chikalda do. ...	2,400	4	...	...	2,400	4		
Amraoti District ...	Amraoti Hills Range.	Amraoti District ...	Amraoti Hills Reserve	50,973	80	...	...	50,973	80		
Akola District ...	...	Akola District ...	Loni do.	908	1	...	...	908	1		
		Do. ...	Bhongaon do.	1,368	2	...	...	1,368	2		
Buldana District ...	Geru Matergaon.	Buldana District ...	Geru Matergaon do.	45,992	72	...	...	45,992	72		
Do. ...	Amdari Range.	Do. ...	Amdari do.	13,717	21	...	...	13,717	21		
Basim District ...	Ghatbori Range.	Buldana, Akola, and Basim Districts.	Ghatbori do.	23,760	37	...	...	23,760	37		
Do. ...	Do.	Akola District. ...	Mandwa do.	5,475	9	...	...	5,475	9		
Do. ...	...	Basim District ...	Penganga do.	11,575	18	...	...	11,575	18		
Do. ...	...	Do. ...	Rui do.	6,647	10	...	...	6,647	10		
Do. ...	...	Do. ...	Gahuli do.	8,572	13	935	...	9,507	15	Published in the Hyderabad *Residency Orders* of 1st Sept. 1885.	
Wun District ...	Kinwat Range.	Do. ...	Kinwat do.	52,558	82	...	...	52,558	82		
Do. ...	Kelapur Range.	Wun District ...	Kelapur do.	40,289	63	...	...	40,289	63		
Do. ...	...	Do. ...	Gondwakri do.	16,359	26	...	...	16,359	26		
Do. ...	...	Do. ...	Khorad do.	16,117	25	...	...	16,117	25		
Do. ...	...	Do. ...	Pathroat do.	2,889	5	...	...	2,889	5		
Do. ...	...	Do. ...	Anjankher do.	7,634	12	...	...	7,634	12		
Do. ...	...	Do. ...	Lonbehel do.	9,437	15	...	...	9,437	15		
Do. ...	...	Do. ...	Tiwsala do.	4,873	8	...	...	4,873	8		
			Total ...	708,792	1,108	935	117	709,610	1,110		
			DISTRICT RESERVED FORESTS.								
Ellichpur District...	...	Ellichpur District ...	Ellichpur District ..	35,857	56	82	...	35,939	56		
Amraoti District ...	...	Amraoti District ...	Amraoti District ...	150,327	235	*12	†12	150,327	235	* Taken under Section 129 of the Forest Code, 3rd Edition, *vide* Conservator's No. 204 of 3rd February 1886, to Deputy Commissioner, Amraoti. † *Vide* Hyderabad *Residency Orders* of 15th March 1886.	
Akola District ...	...	Akola District ...	Akola District ...	49,248	77	...	...	49,248	77		
Buldana District ...	...	Buldana District ...	Buldana District ...	5,132	8	...	...	5,132	8		
Basim District ...	...	Basim District ...	Basim District ...	19,038	30	...	...	19,038	30		
Wun District ...	..	Wun District ...	Wun District ...	19,124	30	...	...	19,124	30		
			Total ...	278,726	436	94	12	278,808	436		
			Total ...	987,518	1,544	1,029	129	988,418	1,546		
			UNRESERVED FORESTS.								
Ellichpur District	...	Ellichpur District...	Melghat Taluk ...	586,400	916	...	...	586,400	916		
	...	Akola District ...	Akola Taluk (Land in Melghat Hills).	1,460	2	...	...	1,460	2		
			Jalgaon Taluk (Land in Melghat Hills).	4,476	7	...	...	4,476	7		
	...	Ellichpur District..	Ellichpur District ...	128	...	76	...	204	...		
Amraoti District...	...	Amraoti District	Amraoti Taluk (Land in Amraoti Hills).	2,358	4	...	...	2,358	4		
			Chandur Taluk (Land in Amraoti Hills).	1,003	2	...	...	1,003	2		
			Amraoti District ...	14,162	22	...	...	14,162	22		
Akola District ...	...	Akola District ...	Akola District ...	84,035	131	5,542	...	89,577	140		
Buldana District ...	...	Buldana District ...	Buldana District ...	166,122	260	...	...	166,122	260		
Basim District ...	...	Basim District ...	Basim District ...	448,279	700	...	...	448,279	700		
Wun District ...	...	Wun District ...	Wun District ...	496,646	776	...	20,846	475,800	743		
			Total ...	1,805,069	2,820	5,618	20,846	1,789,841	2,796		

FORESTS.

ANNUAL FORM No. 50.—*Register of breaches of Forest Rules during* 1885-86.

I.—Prosecution in the Courts of Law.

Forest Division and Civil District.	Cases pending from 1884-85.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Ellichpur District.														
Reserved Forests ...	...	3	7	...	...	10	10	10	23	...	3	10	26	...
Unreserved Forests.	...	...	5	...	112	117	117	98	144	19	36	117	180	...
Ellichpur District Forests. ...	...	...	2	...	...	2	2	2	5	...	...	2	5	...
Amraoti District.														
Amraoti Hills Reserve ...	...	...	22	5	...	27	27	21	49	6	18	27	67	...
Amraoti Dist. Forests	1	1	65	21	6	93	94	81	102	12	15	93	117	1
Akola District.														
Reserved Forests ...	...	...	3	1	...	4	4	3	6	1	3	4	9	...
Akola Dist. Forests.	...	...	43	...	...	43	43	34	80	8	19	42	99	1
Basim District.														
Reserved Forests ...	...	...	4	3	...	7	7	5	26	2	3	7	29	...
Basim Dist. Forests.	1	...	27	...	...	27	28	25	40	3	24	28	64	...
Buldana District.														
Reserved Forests ...	...	...	...	1	...	1	1	1	1	...	...	1	1	...
Buldana Dist. Forests	...	...	49	1	11	61	61	42	116	18	58	60	174	1
Wun District.														
Reserved Forests ...	...	1	9	5	1	16	16	13	21	3	19	16	40	...
Wun District Forests	...	...	14	...	...	14	14	13	23	1	2	14	25	...
Total ...	2	5	250	37	130	422	424	348	636	73	200	421	836	3

ANNUAL FORM No. 51.—*Area of Forest tracts protected from fire during the dry season* 1886, *to accompany Report for* 1885-86.

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1885.	During dry season of 1886.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
			Acres.	Acres.	Acres.	Acres.	Rs.	
Ellichpur District.	Bairagarh Reserve Raipur block	1870	14,231	14,231	...	14,231	468	
	Remainder of Reserve ...	1872	257,638	257,818	551	257,267	1,733	
	Gagamal Reserve ...	1877	115,120	115,083	...	115,083	556	
			386,989	387,132	551	386,581	2,757	
Amraoti District.	Chiroree block of Amraoti Hills Reserve ...	1881	13,071	13,071	1,300	11,771	307	
Akola District.	Loni and Bhongaon Reserve	1882	2,276	2,276	...	2,276	...	
Basim District.	Penganga Reserve ...	1880	11,575	11,575	2,373	9,202	124	
	Ghatbori do. ...	1881	26,833	29,235	...	29,235	152	
	Rui do. ...	1882	6,647	6,647	...	6,647	35	
	Gahuli do. ...	1885	9,507	9,507	610	8,897	29	
			54,562	56,964	2,983	53,981	340	
Buldana District.	Geru Matergaon Reserve.	1880	44,778	45,992	...	45,992	134	
	Andari do. ...	1883	13,701	13,717	...	13,717	122	
			58,479	59,709	...	59,709	256	
Wun District	Kinwat Reserve ...	1881	52,234	52,558	1,750	50,808	718	
	Kelapur do. ...	1881	35,826	40,289	8,975	31,314	562	
	Darwha Range ...	1882	47,365	52,436	10,783	41,653	928	
	Wun do. ...	1882	3,943	4,873	2,000	2,873	63	
			139,368	150,156	23,508	126,648	2,271	
	Total ...		654,745	669,308	28,342	640,966	5,931	

FORESTS.

ANNUAL FORM No. 52.—*Area of Plantations*, 1885-86.

Division.	Name of Plantation.	Area in acres. On 1st April 1885.	Added during the year.	Excluded during the year.	Area on 31st March 1886.	Receipts (Of the year.)	Charges (Of the year.)	Remarks.
	REGULAR PLANTATION BAIRAGARH RESERVE.							
Ellichpur District	Pili	52	...	...	52	...	...	Teak.
	Rukiadoh	13	...	...	13	...	...	Teak and bamboo.
	Sombadoh	2	...	...	2	...	...	Do.
	Dugapati	11	...	...	11	...	...	Do.
	Pipalcotah	160	...	...	160	...	...	Do.
	Saoli	110	...	...	110	...	...	Do.
	Bujru	31	...	...	31	...	...	Do.
	Labu	279	...	...	279	...	...	Do.
	Saoli and Kurita	30	...	...	30	...	...	Do.
	Jambulwarree	600	...	...	600	...	...	Do.
	Abapur	120	...	...	120	...	1	Do.
	Kolkas	1	...	...	1	...	92	Forest garden.
	Miscellaneous charges	...	...	...	...	...	96	Purchase of seed.
	Total Regular Plantations	1,409	...	...	1,409	...	189	
	CULTURAL OPERATIONS.							
Ellichpur District	Gugamal Reserve	...	750	...	750	...	95	Broadcast sowing.
	Chikalda Reserve	...	...	...	...	...	125	Forest garden.
	Miscellaneous charges	...	...	...	...	...	6	
	Total	...	750	...	750	...	226	
Amraoti District	Amraoti Hills Reserve	967	448	...	1,415	...	263	Sowing blanks with babul, tewas, and bamboos.
	Amraoti District Forests	12	334	...	346	...	471	Sowing with saondal, shisam, tewas, bamboo, and mango and nursery of fruit trees at Karanja for road-side planting.
	Total	979	782	...	1,761	...	734	
Akola District	Loni Reserve	286	21	...	307	...	141	Sowing with babul and soundar.
	Bhongaon Reserve	347	4	...	351	...	22	Do. do.
	Miscellaneous charges	...	...	...	...	...	5	
	Total	633	25	...	658	...	168	
Buldana District	Geru Matergaon Reserve	247	657	...	904	...	14	Teak sowing.
	Amdari Reserve	...	87	...	87	...	7	Do.
	Total	247	744	...	991	...	21	
Basim District	Ghathori Reserve	271	316	...	587	...	52	Teak sowing.
	Penganga Reserve	...	1,749	...	1,749	...	...	Do.
	Rui Reserve	...	50	...	50	...	29	Do.
	Total	271	2,115	...	2,386	...	81	
Wun District	Darwha Range	...	...	...	...	...	3	Sowing teak seed
	Kelapur Reserve	...	...	...	...	...	2	Do.
	Tiwsala Reserve	...	...	...	...	...	2	Do.
	Gondwakri Reserve	...	...	...	...	...	2	Do.
	Lonbehel Reserve	...	...	...	...	...	2	Do.
	Khorad Reserve	...	...	...	...	...	2	Do.
	Miscellaneous charges	...	...	...	...	...	88	Collecting teak seed.
	Total	...	...	...	...	...	101	
	Total Cultural Operations	2,130	4,416	...	6,546	...	1,331	
	Grand Total	3,539	4,416	...	7,955	...	1,520	

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FORESTS.

ANNUAL FORM No. 53.—*Trees felled or girdled by Government Agency during the year* 1885-86—(*Improvement fellings.*)

Division.	Trees felled or girdled.		Remarks.
	Description.	Number.	
	Bairagarh Reserve.		
Elichpur District	Teak	552	
	Dhamin	1	
	Tendu	1	
	Haldu	54	
	Bhera	2	
	Kalamb	1	
	Bilawa	1	
	Lendya	6	
	Sadra	12	
	Bijasal	1	
	Dowra	9	
	Kurune	2	
	Total ...	642	
	Total of the circle ...	642	

FORESTS.

ANNUAL FORM No. 54.—*Outturn of Timber and Firewood during the year* 1885-86.

Division.	Description of Material.	Outturn in cubic feet.							
		Improvement fellings.	Clearances.	Spinnings.	Total.	Removed by Government agency.	Purchasers.	Free grants.	Right holders.
	I.— Reserved Forests.								
Ellichpur District ...	Trees as per form 53. Nos.	642	...	...	642	...	...	...	...
	Teak, Tewas, Sheshum cft.	...	...	...	...	...	8,314	...	...
	Other wood ... "	...	...	...	...	...	101	...	...
	Firewood ... "	...	..	...	...	...	28	...	...
		642	...	...	642	...	8,443	...	...
Amraoti do. ...	Timber ... ... cft.	..	...	...	...	...	305	...	...
	Firewood and charcoal "	...	...	...	...	...	11,337	...	...
		...	...	...	...	...	11,642	...	...
Akola do. ...	Firewood and charcoal cft.	...	..	...	...	...	17,192	...	...
Basim do. ...	Timber ... ... "	...	...	...	...	...	112	...	...
	Firewood ... "	...	...	...	...	...	8,174	...	...
		...	...	...	...	...	8,286	...	...
Buldana do. ...	Timber ... ... cft.	...	...	...	...	...	700	...	...
	Firewood ... "	...	...	...	...	...	6,697	...	...
		...	...	...	...	...	7,397	..	...
Wun do. ...	Timber ... ... cft.	...	...	...	...	...	140	...	...
	Firewood ... "	...	...	...	...	...	28	...	...
		...	...	...	...	...	168	...	...
	Total I ...	642	...	...	642	...	53,128	...	...
	II.—District Forests.								
Ellichpur ...	Firewood ... cft.	...	...	...	...	...	630	...	...
	Charcoal ... "	..	...	...	...	...	168	...	...
		...	...	...	...	...	798	...	...
Wun do. ...	Timber ... ... cft.	...	...	...	...	...	3,500	...	...
	Firewood ... "	...	...	...	...	...	1,176	...	...
	Charcoal ... "	...	...	...	...	...	84	...	...
		...	...	...	...	...	4,760	...	...
	Total II ...	...	...	...	...	...	5,558	...	...
	III.—Unreserved Forests.								
Ellichpur do. ...	Teak, Tewas, Sheshum cft.	...	...	...	...		131,065	..	...
	Other wood ... "	...	...	...	...	...	136,541	...	...
	Firewood ... "	...	...	...	...	...	153,297	...	...
	Charcoal ... "	...	...	..	...	...	114,212	...	...
		...	...	...	...	...	535,115	...	...
	Total III ...	...	...	...	...	...	535,115	...	...
	Grand Total ...	642	...	...	642	...	593,801	...	....

FORESTS.

Annual Form No. 55.—*Outturn of Minor Forest Produce.*

Division.	Description of produce.	Produce removed or utilized. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants on pass. Quantity.	By free grants on pass. Value.	By right holders. Quantity.	By right holders. Value.	Total. Quantity.	Total. Value.
	I.—Reserved Forests.		Rs.		Rs.		Rs.		Rs.		Rs.
Ellichpur District...	Bamboos ... No...	...	...	1,382,109	15,163	...	...	...	...	1,382,109	15,163
	Roots and fruits ... Tons.	...	...	50½	355	...	...	...	...	50½	355
	Lac ... ... „	...	...	½	6	...	...	...	...	½	6
Amraoti do.	Grass ... ... „	...	...	1,641	2,135	...	...	...	...	1,641	2,135
	Grazing camels ... No...	...	...	8							
	Do. buffaloes ... „ ...	...	...	1,327	1,490	...	...	...	...	13,052	1,490
	Do. cows, &c. ... „ ...	...	..	6,446							
	Do. sheep & goats „ ...	...	...	5,271							
	Minor produce ... Tons.	...	...	10	54	...	...	...	...	10	54
Akola do. ..	Grazing buffaloes .. No...	...	...	83	..	...	..	...	...	1,374	...
	Do. cows, &c. ... „ ...	...	...	1,291							
Basim do. ...	Bamboos ... „ ...	...	...	100	2	...	...	...	...	100	2
	Grass ... Tons.	...	...	317	1,106	...	..	...	...	317	1,106
	Grazing buffaloes ... No...	...	...	868	432	...	...	...	...	16,093	4,239
	Do. cows, &c. ... „ ...	...	...	15,225	3,807						
Buldana do. ..	Grass .. ... Tons.	...	..	507	1,726	...	...	...	...	507	1,726
	Grazing buffaloes ... No...	...	...	1,387	689	...	...	...	...	14,858	4,058
	Do. cows, &c. ... „ ..	...	...	13,471	3,369						
Wun do. ...	Bamboos ... „ ...	...	...	39,475	408	...	...	...	...	39,475	408
	Grass ... ... Tons.	...	...	3,960	1,988	...	...	...	...	3,960	1,988
	Grazing buffaloes ... No...	...	...	311	156	...	...	...	...	11,223	2,884
	Do. cows, &c. ... „ ...	...	...	10,912	2,728						
	II.—District Forests.										
Ellichpur do. ...	Grazing buffaloes ... No...	...	...	925	121	..	...	...	...	8,348	543
	Do. cows, &c. .. „ ...	...	...	6,158	348						
	Do. sheep, &c. ... „ ...	...	...	2,265	74						
Amraoti do. ...	Grazing camels ... „ ...	...	..	12							
	Do. buffaloes ... „ ...	...	..	33,179							
	Do. cows, &c. ... „ ...	..	..	131,949	...	...	...	...	...	23,019	...
	Do. sheep, &c. ... „ ...	...	...	64,879							
Basim do. ...	Grazing cows, &c. ... „ ...	...	...	578	...	...	...	...	...	578	...
Wun do. ...	Bamboos ... „ ...	...	...	37,068	370	...	..	..	..	37,068	370
	Grass ... ... Tons.	...	...	3	425	...	...	...	...	3	425
	Grazing buffaloes ... No...	...	..	48,442	12,060	...	...	...	...	441,172	55,120
	Do. cows, &c. ... „ ...	...	...	298,382	37,205						
	Do. sheep, &c. ... „ ...	...	...	94,348	5,864						
	III.—Unreserved Forests.										
Ellichpur do. ...	Bamboos ... No...	...	...	1,256,549	12,790	...	...	...	...	1,256,549	12,790
	Grass ... ... Tons.	...	...	2,213	1,456	...	...	...	...	2,213	1,456
	Grazing camels ... No...	...	...	58							
	Do. buffaloes ... „ ...	...	...	16,027	9,558	...	...	...	...	153,180	9,558
	Do. cows, &c. ... „ ...	...	...	90,566							
	Do. sheep, &c. ... „ ...	...	..	46,529							
	Teak leaves ... Tons.	...	...	263	708	...	...	...	...	263	708
	Roots and fruits ... „ ...	...	...	654⅓	2,976	..	..	...	...	654⅓	2,976
	Lac ... ... „ ...	...	...	12½	202	...	...	...	...	12½	202
	Gum ... ... „ ...	...	...	3½	30	...	...	...	...	3½	30
	Burnt lime ... „ ...	...	...	4,200	7	...	...	...	...	4,200	7
	Miscellaneous ... „ ...	...	...	11⅓	81	...	...	...	...	11⅓	81

FORESTS.

ANNUAL FORM No. 57.—*Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year* 1885-86.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
DIRECTION OFFICE.									
Surveying and other instruments ...	16	...	...	11	...	...			
Tools	195	...	...	18	...	...			
Office furniture	137	...	75	112	...	548			
Tents	7	...	1,439	8	...	1,059			
Miscellaneous	60	...	...	35	...	...			
Elephant	1	...	3,000	1	...	3,000			
Total ...	416	...	4,514	185	...	4,607			
ELLICHPUR DISTRICT.									
Surveying and other instruments ...	15	...	...	18	...	...			
Tools	689	...	953	699	...	953			
Office furniture	179	...	1,167	174	...	1,100			
Tents	4	...	711	1	..	15			
Bungalow	1	...	5,000	2	...	8,000			
Miscellaneous	216	...	392	218	...	376			
Elephant	1	...	800	1	...	800			
Bullocks	5	...	155	5	...	150			
Total ...	1,110	...	9,178	1,118	...	11,394			
AMRAOTI DISTRICT.									
Surveying and other instruments ...	2	...	4	3	...	...			
Tools	52	...	9	63	...	109			
Office furniture	49	...	188	50	...	191			
Tents	3	...	510	3	...	470			
Miscellaneous	23	...	18	30	...	49			
Buffaloes	...	...	...	1	...	15			
Total ...	130	...	729	150	...	834			
AKOLA DISTRICT.									
Surveying and other instruments ...	...	...	...	...	...	...			
Tools	...	...	...	166	...	...			
Office furniture	...	...	...	38	...	161			
Tents	...	...	...	2	...	464			
Miscellaneous	...	...	...	14	.	...			
Total ...	...	...	...	220	...	625			
BASIM AND BULDANA DISTRICTS.									
Surveying and other instruments ...	6	...	...	15	...	...			
Tools	240	..	11	253	...	11			
Office furniture	56	...	3	71	...	3			
Tents	9	...	628	4	...	528			
Miscellaneous	80	...	98	89	...	...			
Elephant	1	...	1,112	1	...	1,112			
Total ...	392	...	1,852	433	...	1,654			
WUN DISTRICT.									
Surveying and other instruments ...	25	...	...	33	...	...			
Tools	160	...	130	160	...	130			
Office furniture	36	...	223	49	...	339			
Tents	3	...	581	3	...	389			
Miscellaneous	86	...	85	87	...	88			
Total ...	310	...	1,019	332	...	946			
Grand Total ...			17,292	Total ...		20,060	2,768		

FORESTS.

ANNUAL FORM No. 58.—*Summary of Revenue and Expenditure of the different District Forests during* 1885-86.

Budget Heads.—Revenue.	Direction Office.	Akola.	Amraoti.	Basim and Buldana.	Ellichpur.	Wun.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forests by Government agency:—							
a. Timber	...	...	...	65 0 0	...	...	65 0 0
b. Firewood and charcoal	...	...	...	...	...	...	...
c. Bamboos	...	...	...	...	...	...	...
d. Sandal-wood	...	...	...	...	...	...	...
e. Grass and other minor produce...	...	...	...	...	...	...	...
II.—Timber and other produce removed from the forests by consumers or purchasers:—							
a. Timber	...	10 1 0	6,456 15 3	3,758 10 6	60,467 14 0	1,104 2 0	71,806 10 9
b. Firewood and charcoal	...	7,281 3 3	8,590 1 9	3,167 5 7	6,943 10 0	63 6 0	26,0[illegible] 10 7
c. Bamboos	...	...	...	5 1 0	27,952 15 3	778 7 0	28,736 7 3
d. Grazing and fodder grass	...	4,596 8 0	41,198 3 10	53,326 1 2	12,706 4 6	60,426 6 6	172,253 8 0
e. Other minor produce	...	168 7 3	1,017 11 3	6,097 7 6	4,961 9 3	2,989 10 6	15,234 13 9
III.—Confiscated, drift, and waif wood	...	0 1 3	39 1 0	205 4 0	1,311 2 3	86 11 9	1,642 4 3
IV.—Revenue from forests not managed by Government:—							
a. Duty on foreign timber and other forest produce ...	...	...	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...	...	...
V.—Miscellaneous:—							
a. Fines and forfeitures	...	...	...	65 0 0	7 0 0	20 0 0	92 0 0
b. Refunds	...	20 0 0	1 4 8	5 8 0	2 0 0	3 5 4	32 2 0
c. Other sources	3,001 0 0	330 0 3	37 8 0	296 15 0	392 7 9	80 11 3	4,138 10 3
Total Revenue ...	3,001 0 0	12,415 5 0	57,340 13 9	66,992 4 9	1,14,744 15 0	65,552 12 4	3,20,047 2 10

FORESTS.

Summary of Revenue and Expenditure.

Budget Heads—Expenditure.	Direction Office.	Akola.	Amraoti.	Basim and Buldana.	Ellichpur.	Wun.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—Conservancy and Works.							
.—Timber and other produce removed from the forests by Government agency:—							
a. Timber	...	...	...	...	...	...	...
b. Firewood and charcoal ...	...	...	...	...	...	...	...
c. Bamboos	...	...	...	...	...	...	...
d. Sandal-wood	...	...	...	...	...	...	...
e. Grass and other minor produce	...	...	...	...	...	...	...
I.—Timber and other produce removed from the forests by consumers or purchasers ...	...	1,136 12 6	2,971 10 9	2,758 15 3	70 14 0	5,855 2 5	12,793 6 11
II.—Confiscated, drift, and waif wood	...	...	...	...	...	...	...
V.—Revenue from forests not managed by Government:—							
a. Duty on foreign timber and other forest produce ...	...	...	...	...	...	...	...
b. Revenue from shared and private forests	...	...	...	...	...	...	...
—Rent of leased forests and payments to shareholders in forests managed by Government ...	..	...	...	...	17,119 12 0	...	17,119 12 0
I.—Live stock, stores, tools and plant:—							
a. Purchase of cattle ...	3,000 0 0	...	15 0 0	...	...	...	3,015 0 0
b. Feed and keep of cattle ...	604 4 1	...	..	800 11 2	750 2 8	96 3 8	2,251 5 7
c. Stores, tools and plant ...	113 12 9	650 0 0	141 11 0	138 7 9	290 14 9	196 6 3	1,531 4 6
VII.—Communications and Buildings —							
a. Roads and bridges ...	...	...	50 0 0	113 3 6	9,952 6 7	...	10,115 10 1
b. Buildings	3 1 0	...	559 1 3	129 11 5	1,074 14 3	40 12 0	1,807 7 11
c. Other works	1 3 0	...	...	...	703 9 7	...	704 12 7
VIII.—Demarcation, improvement, and extension of forests:—							
a. Demarcation	...	10 3 0	...	196 0 6	21 12 0	3 7 0	231 6 6
b. Compensation for land and rights	...	...	1 0 0	2 4 0	...	120 0 0	123 4 0
c. Surveys and working plans ...	...	...	...	...	...	100 6 4	1,519 12 11
d. Plantations	...	26 14 0	734 7 9	243 5 4	414 11 6	2,342 8 3	5,840 4 2
e. Protection from fire ...	...	...	206 14 1	596 4 1	2,694 9 9	...	25 2 0
f. Other works	0 2 0	...	...	25 0 0	...	...	
X.—Miscellaneous:—							
a. Refunds	...	830 5 3	115 14 0	16 6 0	50 0 0	52 4 0	1,064 13 3
b. Law charges	...	...	...	...	...	...	...
c. Other charges	761 8 11	160 2 1	593 2 4	339 6 2	2,130 4 9	1,057 10 11	5,042 3 2
Total A.—Conservancy & Works ...	4,483 15 9	2,814 4 10	5,388 13 2	5,359 11 2	35,273 15 10	9,864 12 10	63,185 9 7
B.—Establishment.							
—Salaries:—							
a. Conservators	15,037 4 1	...	...	...	...	...	15,037 4 1
b. Superior Officers	...	1,200 0 0	4,171 12 6	7,600 0 0	8,583 13 11	2,508 2 8	24,063 13 1
c. Subordinate Forest and Depôt Establishments	28 6 2	906 0 0	1,731 2 6	7,066 3 8	14,128 4 3	5,492 2 3	29,354 2 10
d. Office Establishments ...	3,814 5 4	241 13 10	730 14 6	1,215 4 3	3,712 7 8	918 2 5	10,633 0 0
e. Deputation and special allowances	...	...	...	...	...	...	...
Travelling Allowances:—							
a. Conservators	1,867 4 0	...	...	...	...	...	1,867 4 0
b. Superior Officers	133 8 6	270 2 8	935 9 4	1,454 5 8	1,910 8 0	701 13 6	5,405 15 2
c. Subordinate Forest and Depôt Establishments	91 4 8	311 10 8	124 15 8	750 0 8	1,110 3 4	816 1 4	3,204 4 4
d. Office Establishments ...	298 6 4	38 1 4	156 6 0	208 5 0	497 3 8	163 0 8	1,361 7 0
I.—Contingencies:—							
a. Stationery	26 1 3	24 1 6	26 10 0	54 14 0	151 11 6	56 14 10	340 5 1
b. Carriage of tents and records...	329 15 7	153 5 4	409 3 10	388 15 8	634 4 3	327 8 7	2,543 5 3
c. Rents, rates, and taxes ...	...	...	...	...	400 0 0	26 0 0	426 0 0
d. Pay of Police guards ...	...	...	...	...	...	...	..
e. Official postage	372 7 0	26 9 6	39 13 0	131 2 0	232 8 0	36 11 0	839 2 6
f. Sundries	172 6 3	9 9 3	35 8 8	98 14 6	340 0 0	115 10 11	773 7 1
					*+1 5 6		
Total B.—Establishments ...	22,471 4 8	3,181 6 1	8,362 0 0	18,970 1 5	31,701 0 7 +1 5 6	11,162 4 2	95,849 6 5
Grand Total of all Expenditure ...	26,955 4 5	5,995 10 11	13,750 13 2	24,329 12 7	66,975 0 5 +1 5 6	21,027 1 0	1,59,035 0 0

Cost of medicines supplied to Chikalda Dispensary.

COMPTROLLER'S OFFICE,
BOLARUM,
the 26th May 1886.

H. KEENE,
Offg. Comptroller,
Hyderabad.

FORESTS.

FORM No. 59.—*Account-current of the Forest Department, Hyderabad Assigned Districts, for the year* 1885-86.

Dr.

	Rs.	a.	p.	Rs.	a.	p.
To Cash Balance	...			5,040	4	3
„ Revenue as per annual summary Form No. 53	3,20,047	2	10			
„ Service Funds	1,272	4	0			
„ Deposits	...					
„ Forest Cash Remittances, Local :—						
Forest cheques drawn	1,48,869	9	11			
	*—200	0	0			
Inter-divisional transfers	2,023	4	4			
	*+200	0	0	4,72,212	5	1
„ Advances recoverable	† 54,324	0	0			
„ Suspense	...					
„ Account Current (Other Governments)	3,935	9	6			
„ Inter-departmental transfers	829	2	9			
				59,088	12	3
Total ...				5,36,341	5	7

Cr.

	Rs.	a.	p.	Rs.	a.	p.
By expenditure as per annual summary Form No. 58 ...	1,59,035	0	0			
„ Deposits	...					
„ Forest Cash Remittances, Local :—						
Remittances to treasuries	3,20,128	3	10			
Inter-divisional transfers	2,223	4	4			
Cancelled cheques	530	8	7	4,81,917	0	9
„ Advances recoverable	52,050	4	5			
„ Suspense	...					
„ Account-Current (Other Governments)	311	8	2			
„ Inter-departmental transfers	65	0	0	52,426	12	7
„ Cash Balance	...			1,997	8	3
Total ...				5,36,341	5	7

* Advance made by the District Forest Officer, Basim, and transferred to Akola credited in the latter district accounts under cheques instead of to transfers from other divisions.
† Rs. 95 4-1, being the amount paid by the Berar Secretary to the Mahwat of Elephant Mohtni Gaz—includes.

COMPTROLLER'S OFFICE,
BOLARUM,
The 26th May 1886.

H. KEENE,
Offg. Comptroller,
Hyderabad.

FORESTS.

ANNUAL FORM No. 60.—*Revenue received and Outstandings on account of Revenue during* 1885-86.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.			Total.			Amount realized during year.			Balance due to the Department at end of year.
			Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	
Direction Office ...	Miscellaneous other sources ...	...	3,001	0	0	3,001	0	0	3,001	0	0	...
Ellichpur District.	Timber and other produce ...	...	1,14,744	15	0	1,14,744	15	0	1,14,744	15	0	...
Amraoti District...	Do.	...	57,340	13	9	57,340	13	9	57,340	13	9	...
Akola District ...	Do.	...	12,415	5	0	12,415	5	0	12,415	5	0	...
Basim-Buldana District ...	Do.	...	66,992	4	9	66,992	4	0	66,992	4	9	...
Wun District ...	Do.	...	65,552	12	4	65,552	12	4	65,552	12	4	...
	Total ...	...	3,20,047	2	10	3,20,047	2	10	3,20,047	2	10	...

ANNUAL FORM No. 61.—*Outstandings and Liabilities on account of Contractors and Disbursers for* 1885-86.

Districts.	Department Debtor.						Department Creditor.						Balance due.		
	At commencement of year.	Recoveries in cash and value of supplies and work done during year.			At close of year.			At commencement of year.			Payment made during year.			At close of year.			To Department [Outstandings.]			By Department [Outstandings.]
		Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	
Direction Office ...	...	1,983	2	0	1,983	2	0	1,337	2	9	977	14	10	2,315	1	7	331	15	7	...
Amraoti	...	5,101	1	5	5,101	1	5	659	8	0	6,873	2	2	7,532	10	2	2,431	8	9	...
Melghat (Ellichpur) ...	...	15,138	6	11	15,138	6	11	7,687	12	10	10,787	10	2	18,475	7	0	3,337	0	1	...
Wun	...	15,906	15	9	15,906	15	9	855	0	4	15,327	15	3	16,182	15	7	275	15	10	...
Southern { Akola ...	...	2,412	14	2	2,412	14	2	...			2,739	9	9	2,739	9	9	326	11	7	...
Southern { Basim and Buldana	...	*13,886	3	8	13,886	3	8	1,205	13	2	15,544	0	3	16,749	13	5	2,863	9	9	...
Total ...	...	54,428	11	11	54,428	11	11	11,745	5	1	*52,250	4	5	63,995	9	6	9,566	13	7	...

* Includes Rs. 200 transferred to Akola on its separation, but treated in this office as inter-divisional transfers.

ANNUAL FORM No. 62.—*Financial results of the year* 1885-86.

Division.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.	
	Receipts	Charges	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction Office	...	...	3,001	20,404	6,551	3,001	26,955
Ellichpur District	...	...	1,14,745	43,929	23,048	1,14,745	66,977
Amraoti District	...	...	57,341	10,070	3,681	57,341	13,751
Akola District	...	...	12,415	5,000	995	12,415	5,995
Basim-Buldana District	...	...	66,992	18,048	6,282	66,992	24,330
Wun District	...	...	65,553	15,555	5,472	65,553	21,027
Total	...	...	3,20,047	1,13,006	46,029	3,20,047	1,59,035

FORESTS.

APPENDIX A.—*Cattle grazed on payment in the various Forests.*

Divisions.	Districts, &c.	Year.	Camels.	Buffaloes.	Cows and bullocks.	Sheep and goats.	Total.	Remarks.
Ellichpur District.	Meighat Ellichpur, and Betul, Central Provinces	1885-86	...	6,550	24,307	4,781	35,638	
	Daryapur and Ellichpur Taluks of Ellichpur	1885-86	58	5,791	34,060	34,793	74,702	
	Akot and Jalgaon Taluks of Akola ...	1885-86	...	3,686	32,199	6,955	42,840	
	Total ...	1885-86	58	16,027	90,566	46,529	153,180	
	Bairam grazing tract, Ellichpur Taluk...	1885-86	...	925	5,158	2,265	8,348	
	Total ...	1885-86	58	16,952	95,724	48,794	161,528	
Amraoti District.	Amraoti Hills	1885-86	8	1,327	6,446	5,271	13,052	
	Amraoti District Forests	1885-86	12	33,179	131,949	64,879	230,019	
	Total ...	1885-86	20	34,506	138,395	70,150	243,071	
Akola District.	State Forests	1885-86	..	83	1,291	..	1,374	
	District Forests	1885-86	...	...	...	...	...	Not known; grazing sold by auction.
	Total ...	1885-86	...	83	1,291	...	1,374	
Basim District.	State Forests	1885-86	...	865	15,228	...	16,093	
	District Forests	1885-86	...	...	578	...	578	
	Total ...	1885-86	...	865	15,806	...	16,671	
Buldana District.	State Forests	1885-86	...	1,387	13,471	...	14,858	
	District Forests	1885-86	...	...	...	...	...	Not known; grazing sold by auction.
	Total ..	1885-86	...	1,387	13,471	...	14,858	
Wun District.	State Forests	1885-86	...	311	10,912	...	11,223	
	District Forests	1885-86	...	48,442	298,382	94,348	441,172	
	Total ...	1885-86	...	48,753	309,294	94,348	452,395	
	Grand Total ...	1885-86	78	102,546	573,981	213,292	889,897	

FORESTS.

APPENDIX B.—*Meteorological Observations made in Reserved Forests.*

| Month. | Mean of Hygrometer. | | | | | | | | Mean of Thermometer. | | | | | | Rain-fall. | | | | | | | |

Extract from the Proceedings of the Resident at Hyderabad, No. 2215-R, dated Hyderabad Residency, 27th August 1886

READ—

The Annual Report on Forest Administration in the Hyderabad Assigned Districts for the year 1885-86.

RESOLUTION.

THE area of forest lands underwent very slight change during the year. Two square miles were added to the State reserves, while the area of unreserved forests suffered a slight diminution. The question of forest boundaries is receiving due attention.

2. The survey of the Melghat was continued during the year under review, and despite the unhealthy character of the forests, from which, the Resident observes with regret, that the staff suffered severely, good work was accomplished. Four hundred and three square miles were topographically surveyed; of this area, two hundred and forty-one square miles were surveyed on the scale of 2″= 1 mile, and the remainder was surveyed on the scale of 4″= 1 mile. Four hundred and ten square miles were triangulated, and two hundred and nine lineal miles of traversing were run over an area of four hundred and fifty-eight square miles. Good progress was also made in the record of certain details and in the preparation of maps.

3. The question of the boundary between the Hyderabad Assigned Districts and the Central Provinces has received the attention of the Resident, and, with the permission of the Chief Commissioner of the latter province, it is hoped that this important question will find a satisfactory settlement in the coming cold season.

4. In their orders on the report for last year the Government of India remarked on Major van Someren's statement that working plans were not at present required in Berar. The Conservator succeeds in showing, in the 18th paragraph of his present report, that although working plans, in the strict sense of the word, do not exist, still the system on which the Berar forests are worked fulfils many of the conditions which would enter into any working plan that would be prepared. In the next paragraph he describes the steps that are actually being taken to introduce working plans into some of the forests.

5. Breaches of the forest laws have risen from 308 in 1884-85 to 421 in 1885-86. But the proportion of convictions to prosecutions shows a slight falling off, which is mainly due to the figures of the Buldana District, which appear to show a want of care in setting the law in motion.

6. The figures of last year proved that fire protection was more cheaply and at the same time effectively carried out in Berar than in any other province in India. The statistics now under review do not present quite so brilliant a result, but there is still plenty of room for congratulation, as the expense was but little increased and the amount of failure was not great.

7. It is probable that the system of levying a general grazing tax will be before long definitely introduced into Berar in lieu of selling the grazing by auction, a plan which is generally condemned by the district officers. It is believed that the change will be welcomed by the people, and will not be attended by loss of revenue.

8. The financial results of the year may, under the circumstances explained by the Conservator, be accepted as satisfactory. The heavy rains in the winter kept down the outturn of forest produce removed from the forests, but the deficit

was more than compensated for by the increased receipts under the heading of "Grazing and fodder grass." The figures for the year were as follows :—

		Revenue. Rs.	Charges. Rs.	Surplus. Rs.	Deficit. Rs.
State Reserves	...	54,331	62,470	...	8,139
District do.	...	1,72,605	45,049	1,27,556	...
Unreserved Forests	...	93,111	51,516	41,595	...
Total	...	3,20,047	1,59,035	1,69,151	...
Deduct deficit			...	8,139	...
Net surplus			...	1,61,012	...
Total in 1884-85	...	2,93,448	1,52,514	1,40,934	...

Or a net surplus of Rs. 20,078 more than in the previous year.

9. The Resident is glad to find that the new rules, which bring the forests directly under the Deputy Commissioners and thus cement the connection between the Forest and the Revenue Department, are working well and smoothly. His thanks for the results of the past year are due to the Conservator and the officers mentioned in paragraphs 71 and 73 of his report.

(By order.)
J. R. FITZGERALD,
Secretary for Berar.

No. 953 F.

FROM

SIR E. C. BUCK, KT.,

Secretary to the Government of India.

To

THE RESIDENT AT HYDERABAD.

Rev. & Agri. Dept
Forests.

Calcutta, the 16th November 1886.

SIR,

I AM directed to acknowledge the receipt of your letter No. 297G., dated the 30th August last, submitting the Progress Report of Forest Administration in the Hyderabad Assigned Districts for the year 1885-86, with the Commissioner's remarks and your orders on it.

His Excellency the Governor General in Council is pleased to observe the punctuality with which the Report and your review of it have been submitted. The former gives a concise history of the year's Forest work in Berar.

2. It is satisfactory to notice that in the Hyderabad Assigned Districts, as elsewhere, the scheme for a closer association between District and Forest Officers worked well. The want of an Officer for the Buldana District was an obstacle to its full development. This difficulty has, since the close of the year, been removed, sanction having been accorded by the Government of India to the appointment of an additional Sub-Assistant Conservator.

3. The changes which took place during the year in the constitution of the forest areas under the control of the Forest Department are unimportant. Two square miles were added to the area of Reserved Forests, 9 square miles of lands thrown up by cultivators were added to the Unreserved Forests, and 33 square miles of this latter class were given over for purposes of cultivation. The demarcation of the forest property of the State is now reported as being generally satisfactory, and evidently receives the necessary attention. The forest boundaries are, as a rule, also utilized as fire-lines, and are consequently cleared at least once a year.

4. Satisfactory progress was made in the work of Forest Surveys and in the preparation of maps, as shown by the fact that 241 square miles were topographically surveyed during the year on the 2-inch scale and 162 on that of 4 inches to a mile. A considerable advance has also been made in triangulation.

The accurate survey of the Melghat elicited the fact that the boundary between Berar and the Central Provinces did not coincide with the line laid down on general and district maps, and it is proposed that an authoritative settlement of the boundary between the two Provinces be effected during the next surveying season.

5. Colonel van Someren's remarks in paragraph 18 of his Report have been read with interest, and I am directed to remark that the careful and appropriate working of the Melghat Forests has not been questioned, and that the improvement, which is reported to have taken place in these once neglected

and overworked forests, is noticed with satisfaction. But, nevertheless, till a regular working-plan has been made, based on a detailed study of its productive capacity, no guarantee exists that the forest property in question will be worked to the full extent of its means. That a valuable forest area, for the produce of which an active demand exists, can be underworked, as well as overworked, has been clearly shown of late by the detailed valuation surveys of forests in the School Circle of the North-Western Provinces, the outturn from which, it was found, could be considerably raised by reason of the larger resources which these investigations brought to light. The only guarantee that a forest is worked correctly lies in a systematic and preconsidered plan of operations; and, under these circumstances, it is noticed with satisfaction that the collection of data for a working-plan of the Bairagarh Forest has been taken in hand.

6. The number of cases brought into Court has considerably increased during the year, as shown in the comparative table below; but a high percentage of convictions was maintained, and this is a sufficient guarantee that the Forest Rules are not worked oppressively:—

Year.	Number of Cases taken into Court.	Percentage of Convictions to total number of Cases decided by the Courts
1885-86	422	83
1884-85	308	84
Increase or decrease in 1885-86 ...	+114	—1

In spite of the increase in the number of cases brought to the notice of the Courts and the number of convictions obtained, Forest protection is reported to have been in some cases less effective than in the previous year, and the Government of India observes with approval that this fact has been duly noticed by you.

7. Fire-protection in Berar has not been quite so successful as last year, and its cost has slightly increased, as may be gathered from the following comparative statement:—

Year.	Area attempted	Failures.	Area protected.	Percentage of Failures to Area Attempted	Cost		Proportion of area under Fire-protection to total area of Reserves per cent
					Per square mile protected.	Per acre protected	
	Sq. miles	Sq. miles	Sq miles.		Rs.	Pies	
1885-86	1,046	44	1,002	4	6	2	— 68
1884-85	1,046	23	1,023	2	5	1¼	68
Increase or decrease in 1885-86	...	+21	—21	+2	+1	+¾	

The greater expense of the year's fire-protection is attributable to heavy winter rains, which kept the grass green till very late in the season, and thereby rendered the burning of fire-traces more difficult than usual. Its smaller success was also, to some extent, due to the same cause, but it is believed that some of the fires were intentionally lighted by dismissed or punished servants of the Department.

8. The question of light grazing continues to occupy the attention of the Forest Department, and it is reported that no ill-effects resulted therefrom in the State Reserves of South Berar. The Conservator even attributes some of the success of natural reproduction to the permission of carefully regulated grazing during the rains.

Cultural operations, mainly broad-casting, extended during the year over 4,416 acres, with what result it is not reported.

9. The opening out of the Melghat Forests by a system of good roads is a work of great importance, and the progress made in this respect has been noticed with satisfaction.

10. The departmental fellings which took place in the Melghat, aggregating 642 trees, were more of the character of improvement-fellings, the exploitation consisting of the removal of badly-grown stock in order to produce a more healthy coppice. No other departmental operations took place, but the following table shows the outturn of timber and fuel removed by purchasers :—

Class of Forests.	Outturn, in cubic feet.		
	Timber.	Firewood and Charcoal.	Total.
State Reserves	9,672	43,456	53,128
District „	3,500	2,058	5,558
Unreserved (or District) Forests	267,606	267,509	535,115
Total in 1885-86 ...	280,778	313,023	593,801
„ 1884-85 ...	327,805	352,590	680,395
Decrease in 1885-86	47,027	39,567	86,594

11. The outturn of minor forest produce is exhibited as follows :—

Class of Forests.	Bamboos.	Grass.	Minor produce.
	No.	Tons.	Tons.
State Reserves	1,421,684	6,425	60¾
District „	37,068	3	...
Unreserved (or District) Forests	1,256,549	2,213	5,144¾
Total in 1885-86 ...	2,715,301	8,641	5,205
„ 1884-85 ...	3,248,626	10,238	1,267
Increase or decrease in 1885-86	—533,325	—1,597	+3,938

The Conservator considers that the large decrease in the quantity of grass taken out of the forests is, to some extent, due to want of careful supervision. Whether this is really the case, or whether the admission of a larger number of grazing cattle is accountable for the falling off, the matter should, under any circumstances, be enquired into.

It is observed that the farming out of the Nâka stations has been proposed and approved of. This is a measure which does not entirely commend itself to the Government of India, especially at a time when doubt has, on several occasions, been expressed by the Conservator regarding the effective control of the *nâkas* by his Department. The full revenue obtainable will, under these circumstances, hardly be realized.

The amount realized as the value of grazing by cattle admitted into the forests was as follows :—

Class of Forests.	Cattle.	Grazing value.
	No.	Rs.
State Reserves	56,600	12,671
District „	680,117	55,672
Unreserved (or District) Forests	153,180	9,558
Total ...	889,897	77,901

This statement is not quite complete, as Form No. 55 does not show the amount realized in Akola, Amraoti, and Basim.

12. The financial results of the year's working were as follow :—

Class of Forests.	Receipts.	Charges.	Surplus.	Deficit.	Proportion of Surplus to gross Revenue, in per cent.
	Rs.	Rs.	Rs.	Rs.	
State Reserves ...	54,331	62,470	...	8,139	...
District „ ...	1,72,605	45,049	1,27,556	...	...
Unreserved (or District) Forests	93,111	51,516	41,595	...	...
Total in 1885-86 ...	3,20,047	1,59,035	1,61,012	...	50
„ 1884-85 ...	2,93,448	1,52,514	1,40,934	...	48
Increase in 1885-86 ...	26,599	6,521	20,078	...	2

The Reserves have yielded the main portion of the year's Revenue; the net Surplus placed to their credit amounting to nearly Rs. 1,20,000. The serious falling off in the Revenue realized from the Unreserved Forests is not explained : this omission should be rectified.

13. His Excellency the Governor General in Council is glad to observe your commendation of the work done by the Officers of the Forest Department and by the Deputy Commissioners of the Amraoti, Wún, Akola, Basim, and Ellichpur Districts.

I have the honour to be,

SIR,

Your most obedient Servant,

E. C. BUCK,

Secretary to the Government of India.

Appendix showing the discrepancies noticed in the Forms appended to the Report of Forest Administration in the Hyderabad Assigned Districts for 1885-86.

FORM No. 49.

(Area of Reserved Forests.)

THE correct equivalent of the 709,610 acres of "Demarcated State Reserves" on the 1st March 1886 is 1,109, and not 1,110, square miles. The total area of both "Demarcated State Reserves" and "District Reserved Forests" on that date is, therefore, 1,545, and not 1,546, square miles.

FORM No. 54.

(Outturn of Timber and Firewood.)

It would have been convenient if an abstract of the several items had been given at the foot of the Form.

FORM No. 55.

(Outturn of Minor Forest Produce.)

Under "District Forests," against the Amraoti District, the total is 230,019, and not 23,019. The value of grazing by cattle is not given in every instance, omissions occurring against the Akola District under "Reserved Forests," and the Amraoti and Basim Districts under "District Forests." It would have been convenient if, at the foot of this Form also, an abstract of the several items had been given.

FORM No. 62.

(Financial Results of the year.)

The column of "Receipts" under "Timber and other Produce removed from the Forests by Government agency" is blank; whereas in Form No. 58 (Summary of Revenue and Expenditure) Rs. 65 is shown as having been realized from this source.

1886.

FILE No. 13

SERIAL No.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

FORESTS.

To

THE RESIDENT AT HYDERABAD.

Dated Calcutta, the 16th November 1886.

SUBJECT.

Reviews the Report of Forest Administration in the Hyderabad Assigned Districts for 1885-86.

G. C. B. Press, Simla.—No. 606 R. & A. D.—20-11-86.—320.